

---

---

# SCIENCE

Index to Volume 177

July–September 1972

**Editorial Board**

ALFRED BROWN  
JAMES F. CROW  
H. S. GUTOWSKY  
ARTHUR D. HASLER  
RUDOLF KOMPNER  
DANIEL KOSHLAND, JR.  
THOMAS KUHN

GARDNER LINDZEY  
ELLIOTT W. MONTROLL  
FRANK PRESS  
FRANK W. PUTNAM  
WALTER O. ROBERTS  
RAYMOND H. THOMPSON  
EDWARD O. WILSON

**Editorial Staff**

WILLIAM BEVAN  
*Publisher*

HANS NUSSBAUM  
*Business Manager*

PHILIP H. ABELSON  
*Editor*

EARL J. SCHERAGO, *Advertising Director*

Published by the

**American Association for the Advancement of Science**

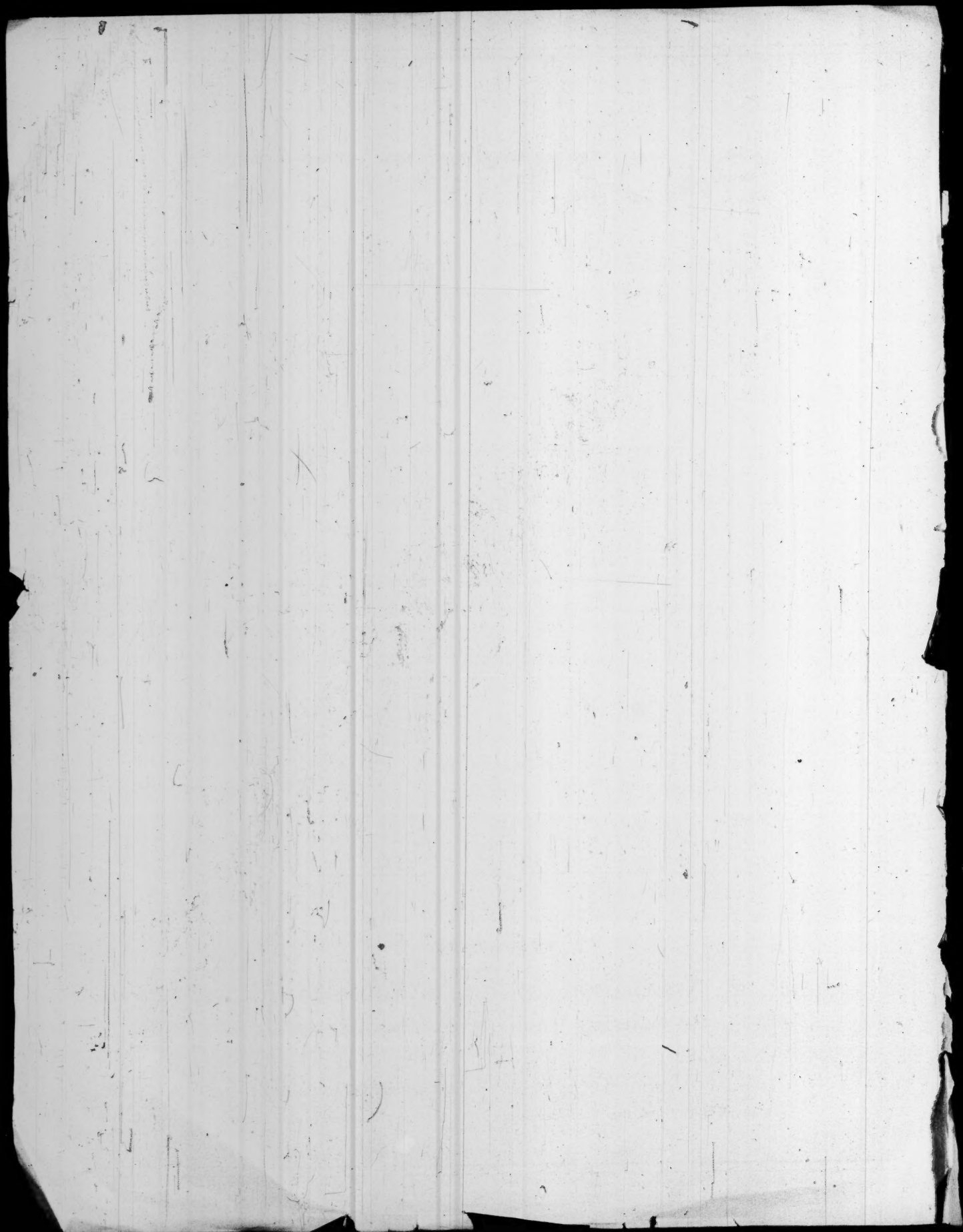
1515 Massachusetts Avenue, NW, Washington, D.C. 20005

Printed in Washington, D.C., by McCall Printing Company, Mid-Atlantic Division

Copyright 1972 by the American Association for the Advancement of Science

---

---



Number	Date of Issue	Pages	Number	Date of Issue	Pages	Number	Date of Issue	Pages
4043	7 July	1-92	4048	11 August	461-552	4052	8 September	821-920
4044	14 July	93-200	4049	18 August	553-644	4053	15 September	921-1036
4045	21 July	201-284	4050	25 August	645-736	4054	22 September	1037-1144
4046	28 July	285-376	4051	1 September	737-820	4055	29 September	1145-1220
4047	4 August	377-460						

The names of authors of books reviewed are printed in SMALL CAPITALS.

- AAAS: annual meeting, 1012, 1128, 1216  
 Abandoned larvacean houses: a unique food source in the pelagic environment, A. L. Alldredge, 885  
 Abelson, P. H. (*editorials*): Earth sciences and the quality of life, 947; Environmental quality, 655; The fourth revolution, 121; The new physics report, 479  
 Abrell, J. W., *et al.*: DNA polymerases from RNA tumor viruses and human cells: inhibition by polyuridylic acid, 1111  
 Absence of polymerase protein in virions of alpha-type Rous sarcoma virus, H. Hanafusa *et al.*, 1188  
 Academic "soul searching" (*letter*), W. A. Maesen and S. J. Maesen, 293  
 Acceleration of argon ions to  $1.17 \times 10^{13}$  electron volts, M. V. Isaila *et al.*, 424  
 Accessible city, The, w. OWEN, *book review* by L. M. Schneider, 783  
 Accretionary processes in the early solar system: an experimental approach, J. F. Kerridge and J. F. Vedder, 161  
 Acetylcholine responses in L cells, P. G. Nelson and J. H. Peacock, 1005  
 Acheson, R. D.: Flood damage (*letter*), 476  
 Ackil, J. E. *See* Peterson, G. B., *et al.*  
 Ackman, R. G. *See* Frair, W., *et al.*  
 Acrosomal proteinase and proteinase inhibitor of human spermatozoa, L. J. D. Zaneveld *et al.*, 702  
 Adams, D. O., *et al.*: Retina: ultrastructural alterations produced by extremely low levels of coherent radiation, 58  
 Adams, S. *See* Ripley, S. D., *et al.*  
 Adenosine 3',5'-monophosphate and N<sup>2</sup>-2'-O-dibutyl-adenosine 3',5'-monophosphate transport in cells, W. L. Ryan and M. A. Durick, 1002  
 Adenosine 3',5' monophosphate is localized in cerebellar neurons: immunofluorescence evidence, F. E. Bloom *et al.*, 436  
 Adler, C., *et al.*: PCB's in the environment (*letters*), 118  
 Adler, I., *et al.*: Apollo 16 geochemical x-ray fluorescence experiment: preliminary report, 256  
 Agnew, H. M.: President's intern program (*letter*), 1057  
 Aharon Katzir-Katchalsky (*letters*), I. Dostrovsky *et al.*, 9  
 Air lead: relation to lead in blood of black school children deficient in glucose-6-phosphate dehydrogenase, M. S. McIntire and C. R. Angle, 520  
 Air pollution: sensitive detection of ten pollutant gases by carbon monoxide and carbon dioxide lasers, L. B. Kreuzer *et al.*, 347  
 Alford, T. C. *See* Hollinshead, A. C., *et al.*  
 Alldredge, A. L.: Abandoned larvacean houses: a unique food source in the pelagic environment, 885  
 Allen, L. B. *See* Sidwell, R. W., *et al.*  
 Allen, R. D. *See* Jahn, T. L., *et al.*  
 Alpern, H. P., and J. C. Crabbe: Facilitation of the long-term store of memory with strychnine, 722  
 Alston, W. P.: *book review* of Purposive explanation in psychology, 251  
 Amos, D. B. *See* Berke, G., *et al.*  
 Amphotericin B potentiation of rifampicin



## B

- as an antifungal agent against the yeast phase of *Histoplasma capsulatum*, G. S. Kobayashi *et al.*, 709
- Anast, C. S., *et al.*: Evidence for parathyroid failure in magnesium deficiency, 606
- Anatomy of the nervous system of *Octopus vulgaris*, The, J. Z. YOUNG, *book review* by G. O. Mackie, 1183
- Anderson, M. S. See Tyson, J. E., *et al.*
- Anderson, P. S., Jr. See Waters, T. D., *et al.*
- Anderson, P. W.: More is different, 393
- Anemic stress as a trigger of myelogenous leukemia in the unirradiated RF mouse, J. K. Gong *et al.*, 274
- Aneshansley, D. See Thompson, W. R., *et al.*
- Angle, C. R. See McIntire, M. S.
- Anstey, R. L., and D. A. Delmet: Genetic meaning of zoecial chamber shapes in fossil bryozoans: Fourier analysis, 1000
- Antidromic action potentials fail to demonstrate known interactions between neurons, B. Mulloney and A. Selverston, 69
- Antigen solubilized from human leukemia: lymphocyte stimulation, J. U. Gutterman *et al.*, 1114
- Aphid alarm pheromone: isolation, identification, synthesis, W. S. Bowers *et al.*, 1121
- Apollo 16 far-ultraviolet camera/spectrograph: earth observations, G. R. Caruthers and T. Page, 788
- Apollo 16 geochemical x-ray fluorescence experiment: preliminary report, I. Adler *et al.*, 256
- Appel, J. B. See Dykstra, L. A.
- Appleby, A. P. See Horne, R. A., *et al.*
- Ardrey, R. See Goodhart, C. B., *et al.*
- Arko, R. J.: *Neisseria gonorrhoeae*: experimental infection of laboratory animals, 1200
- Armstrong, W. D. See Messer, H. H., *et al.*
- Arnold, R. C.: Telecommunications with muon beams, 163
- Arnott, S., *et al.*: Nucleotide conformations, 451
- Around-the-world atomic clocks: observed relativistic time gains, J. C. Hafele and R. E. Keating, 168
- Around-the-world atomic clocks: predicted relativistic time gains, J. C. Hafele and R. E. Keating, 166
- Aryl hydrocarbon (benzopyrene) hydroxylase is stimulated in human lymphocytes by mitogens and benz[a]anthracene, J. P. Whitlock, Jr., *et al.*, 618
- Asbestos contamination of parental drugs, W. J. Nicholson *et al.*, 171
- Ascorbate-nitrite reaction: possible means of blocking the formation of carcinogenic *N*-nitroso compounds, S. S. Mirvish *et al.*, 65
- Atmosphere-ocean interaction, E. B. KRAUS, *book review* by O. M. Phillips, 982
- Atmospheric carbon dioxide: its role in maintaining phytoplankton standing crops, D. W. Schindler *et al.*, 1192
- Atmospheric circulation of DDT, C. A. Stewart, *et al.*, 724
- Atmospheric sulfur: its effect on the chemical weathering of New England, N. M. Johnson *et al.*, 514
- Australian butterflies, C. MCCUBBIN, *book review* by A. B. Klots, 342
- Aviv, D., and E. B. Thompson: Variation in tyrosine aminotransferase induction in HTC cell clones, 1201
- Axonal transport of gangliosides in the goldfish optic nerve, D. S. Forman and R. W. Ledeen, 630
- Axotomy mimicked by localized colchicine application, G. Pilar and L. Landmesser, 1116
- Ayers, J. L., Jr. See Davis, W. J.
- Bache, C. A., *et al.*: Polychlorinated biphenyl residues: accumulation in Cayuga Lake trout with age, 1191
- Bacteriophage sulfur in air pollution, D. C. Grey and M. L. Jensen, 1099
- Baden, M. M.: Narcotic antagonists (*letter*), 1152
- Baker, M. S. See Kaufman, D. G., *et al.*
- BALLIO, A. See Woods, R. K. S., *et al.*
- Baltimore, D. See Hanafusa, H., *et al.*
- Bandler, R. J., Jr., *et al.*: Biting attack elicited by stimulation of the ventral midbrain tegmentum of cats, 364
- Banfalvi, M. See Crawhall, J. C.
- Bantz, D. A. See Schevitz, R. W., *et al.*
- Baranger, E., *et al.*: Women physicists (*letter*), 945
- Bardach, J. E.; *book review* of How animals work, 1138
- Barger, A. C. See Miller, E. D., Jr., *et al.*
- BARKER, A. N., *et al.* (Eds.), Spore research 1971, *book review* of, 1096
- Barlow, H. B., *et al.*: Visual pattern analysis in machines and animals, 567
- BARRINGTON, E. J. W. See HAMBURGH, M.
- Barrio, J. R. See Secrist, J. A., III, *et al.*
- Bartholomew, W. V. See Hauck, R. D., *et al.*
- Battenberg, E. R. See Bloom, F. E., *et al.*
- Beach, F. A.: *book review* of Dr. Kinsey and the Institute for Sex Research, 416
- Beaton, R. See Miller, J. M., *et al.*
- Beatrice, E. S. See Adams, D. O., *et al.*
- Becker, K.: Progress in luminescence dosimetry (*meeting report*), 539
- Bedell, R. B. See Adams, D. O., *et al.*
- Bee and wasp venoms, E. Habermann, 314
- Beebe, G. W. See Waters, T. D., *et al.*
- Behavioral changes of chronic schizophrenic patients given L-5-hydroxytryptophan, R. J. Wyatt *et al.*, 1124
- Behavioral maintenance of high concentrations of blood ethanol and physical dependence in the rat, J. L. Falk *et al.*, 811
- Behind the President's message (*editorial*), D. Wolfe, 13
- BELL, D. J., and B. M. FREEMAN (Eds.), Physiology and biochemistry of the domestic fowl, *book review* of, 690
- Bell, J. S.: *book review* of Perspectives in quantum theory, 880
- Benson, A. A. See Lee, R. F., *et al.*
- Benzodiazepines: anxiety-reducing activity by reduction of serotonin turnover in the brain, C. D. Wise *et al.*, 180
- Berg, C. M.: Equal opportunity at NIH (*letter*), 474
- Berg, G. G. See Mauss, E. A.
- Berger, B. D. See Wise, C. D., *et al.*
- Berger, R. S.: 2,6-Dichlorophenol, sex pheromone of the lone star tick, 704
- BERITASHVILL, I. S., Vertebrate memory, *book review* of, 604
- Berke, G., *et al.*: Tumor immunity in vitro: destruction of a mouse ascites tumor through a cycling pathway, 433
- Berkowitz, N. See Lomax, A.
- Berlind, A.: *book review* of Subcellular organization and function in endocrine tissues, 49
- Berman, H. M. See Seeman, N. C., *et al.*
- Beroza, M., and E. F. Knippling: Gypsy moth control with the sex attractant pheromone, 19
- Bertilsson, L., and L. Palmér: Indole-3-acetic acid in human cerebrospinal fluid: identification and quantification by mass fragmentography, 74
- Bevan, W. (editorial): On growing old in America, 839; Two cooks for the same kitchen?, 1155
- Biederman, I.: Perceiving real-world scenes, 77
- Billone, M. C. See Dallos, P., *et al.*
- Binding protein for fatty acids in cytosol of intestinal mucosa, liver, myocardium, and other tissues, A. R. K. Ockner *et al.*, 56
- Biochemical aspects of insect development, P. S. CHEN, *book review* by G. R. Wyatt, 692
- Biological damage from intranuclear tritium: DNA strand breaks and their repair, J. E. Cleaver *et al.*, 996
- Biological effects of chemical agents (*letters*), R. A. Horne *et al.*, 1152
- Biomedical engineering (*letters*), M. A. Tolcott *et al.*, 562
- Birch's law: why is it so good?, D. H. Chung, 261
- Bishop, P. O. See Gouras, P.
- Biting attack elicited by stimulation of the ventral midbrain tegmentum of cats, R. J. Bandler, Jr., *et al.*, 364
- Bjorkholm, P. See Adler, I., *et al.*
- Blake, C. A., and C. H. Sawyer: Nicotine blocks the suckling-induced rise in circulating prolactin in lactating rats, 619
- Blatt, C. M., *et al.*: Thermal panting in dogs: the lateral nasal gland, a source of water for evaporative cooling, 804
- Bloch, K. J. See Walker, W. A., *et al.*
- Blodget, H. See Adler, I., *et al.*
- Blomberg, B., *et al.*: Genetics of the antibody response to dextran in mice, 178
- Bloom, F. E., *et al.*: Adenosine 3',5'-monophosphate is localized in cerebellar neurons: immunofluorescence evidence, 436
- Blum, F. A., *et al.*: Tunable infrared laser spectroscopy of atmospheric water vapor, 694
- BODEN, M. A., Purposive explanation in psychology, *book review* of, 251
- Bodey, G. P., Sr. See Gutterman, J. U., *et al.*
- Body temperature of *Dermochelys coriacea*: warm turtle from cold water, W. Frair *et al.*, 791
- Bone resorbing activity in supernatant fluid from cultured human peripheral blood leukocytes, J. E. Horton *et al.*, 793
- Bonner, J. See Holmes, D. S., *et al.*
- Borisy, G. G., and J. B. Olmsted: Nucleated assembly of microtubules in porcine brain extracts, 1196
- Bourne, H. R. See Melmon, K. L., *et al.*
- Bouška, V., and R. Rost: Double moldavites in southern Bohemia, 519
- Bower, K. R. See Schafer, R.
- Bowers, W. S., *et al.*: Aphid alarm pheromone: isolation, identification, synthesis, 1121
- Boyd, R.: World dynamics: a note, 516
- Braden, W. G. See Roisen, F. J., *et al.*
- Brain and body temperatures in a panting lizard, E. C. Crawford, Jr., 431
- BRAUN, A. C. (Ed.), Plant tumor research, *book review* of, 784
- Braunschweiger, P. G. See Gong, J. K., *et al.*
- Bremner, J. M. See Hauck, R. D., *et al.*
- Brennan, T. See Arnott, S., *et al.*
- Brewer, E. N.: Limit on tax exclusion (*letter*), 836
- Broadbent, F. E. See Hauck, R. D., *et al.*
- Broad-spectrum antiviral activity of virazole: 1- $\beta$ -D-ribofuranosyl-1,2,4-triazole-3-carboxamide, R. W. Sidwell *et al.*, 705
- Broecker, W. S. See Schindler, D. W., *et al.*
- Brooks, H. See Lewontin, R. C., *et al.*
- Brower, L. P., *et al.*: Variation in cardiac glycoside content of monarch butterflies from natural populations in eastern North America, 426
- BROWN, C. I. See ZIMMERMAN, M. H.
- Brunskill, G. J. See Schindler, D. W., *et al.*
- Bryant, R. C., *et al.*: Synthetic scotophobin in goldfish: specificity and effect on learning, 635



- Buchinger, M., A matter of high priority: IV jornada de flora y fauna Amazonica, 189
- Buddemeier, R. W. See Knutson, D. W., et al.
- Bumpus, F. M. See Türker, R. K., et al.
- Burki, H. J. See Cleaver, J. E., et al.
- Burnett, R. See Munson, T. O.
- Burns, R. J. See Thompson, R. D., et al.
- Burns, T. W. See Anast, C. S., et al.
- Butt, B. A. See McDonough, L. M., et al.
- Butterflies of the Australian region, B. D'ABRERA, book review by A. B. Klots, 342
- Byrne, W. L. See Bryant, R. C., et al.
- C**
- CAIRNS-SMITH, A. G., The life puzzle, book review of, 602
- Calawa, A. R. See Blum, F. A., et al.
- Calcium oxalate crystals in the aragonite-producing green alga *Penicillus* and related genera, E. I. Friedmann et al., 891
- Cameron, I. L. See Jahn, T. L., et al.
- Campbell, M. J., and B. W. Jones: Cyclic changes in insulin needs of an unstable diabetic, 889
- Canceled invitation (letter), J.-C. Chen, 119
- Cancer politics (letters), H. I. Pilgrim and G. S. Duboff, 836
- Capillary suction test of the pressure gradient theory of amoeboid motion, T. L. Jahn et al., 636
- Carbon monoxide and nitric oxide consumption in polluted air: the carbon monoxide-hydroperoxyl reaction, A. A. Westenberg, 255
- Cardoso, S. See Haus, E., et al.
- Carleton, N. P., and W. A. Traub: Detection of molecular oxygen on Mars, 988
- Carotenoids, O. ISLER et al. (Eds.), book review by D. L. Fox, 49
- Carpenter, E. J., et al.: On Carpenter and Smith, 85
- Carruthers, G. R., and T. Page: Apollo 16 far-ultraviolet camera/spectrograph: earth observations, 788
- Casagrande, V. A., et al.: Superior colliculus of the tree shrew: a structural and functional subdivision into superficial and deep layers, 444
- Caulfield, H. J. See Greguss, P.
- Cellarius, R. A., and J. Platt: Councils of Urgent Studies, 670
- CHALLINOR, J., The history of British geology, book review of, 507
- Chandrasekharan, A.: Spongy mesophyll remains in fossil leaf compressions, 354
- Chapman, C. H.: book review of Public archeology, 1097
- Charman, W. N., et al.: Eye marks in vertebrates as aids to vision, 367
- Chase, C. G., and E. C. Perry, Jr.: The oceans: growth and oxygen isotope evolution, 992
- Chauvin, P. B. See Roelofs, R. I., et al.
- Chemical spraying as reported by refugees from South Vietnam, H. A. Rose and S. P. R. Rose, 710
- Chen, J.-C., Canceled invitation (letter), 119
- CHEN, P. S., Biochemical aspects of insect development, book review of, 692
- Cheng, H. H. See Hauck, R. D., et al.
- Chest x-rays (letter), W. S. Cole, 563
- Chi, C. C. See Bandler, R. J., Jr., et al.
- Childers, D. G. See Perry, N. W., Jr., et al.
- Choie, D. D., and G. W. Richter: Lead poisoning: rapid formation of intranuclear inclusions, 1194
- Cholesterol solubility in lecithin-bile salt systems, D. Mufson et al., 701
- Chromatic specificity of the visual evoked response, N. W. Perry, Jr., et al., 813
- Chromosomal RNA: its properties, D. S. Holmes et al., 72
- Chromosome banding patterns in preimplantation mouse embryos, M. N. Nesbitt and R. P. Donahue, 805
- Chung, D. H.: Birch's law: why is it so good?, 261
- Churcher, C. S., and P. E. L. Smith: Kom Ombo: preliminary report on the fauna of late Paleolithic sites in Upper Egypt, 259
- Clark, B. A. See Tolcott, M. A., et al.
- CLAWSON, M., Suburban land conversion in the United States, book review of, 419
- Cleaver, J. E., et al.: Biological damage from intranuclear tritium: DNA strand breaks and their repair, 996
- Cloud seeding (letters), E. P. Wigner and D. Lester, 651
- CLOUDSLEY-THOMPSON, J. L., The temperature and water relations of reptiles, book review of, 420
- COALE, A. J., The growth and structure of human populations, book review of, 1094
- COATNEY, G. R., et al., The primate malaria, book review of, 50
- Cochlear inner and outer hair cells: functional differences, P. Dallos et al., 356
- Cochran, D. G. See Mullins, D. E.
- Code, A. D., and B. D. Savage: Orbiting astronomical observatory: review of scientific results, 213
- Coding properties of reticulocyte lysine transfer RNA's in hemoglobin synthesis, W. R. Woodward and E. Herbert, 1197
- Cohen, D. M. See Collette, B. B., et al.
- COHEN, I. B., Introduction to Newton's 'Principia', book review of, 340. See also KOYRÉ, A.
- Coherent social groups in scientific change, B. C. Griffith and N. C. Mullins, 959
- Cole, W. S.: Chest x-rays (letter), 563
- Collagenase: localization in polymorphonuclear leukocyte granules in the rabbit, P. B. Robertson et al., 64
- Collette, B. B., et al.: Stability in zoological nomenclature, 452
- COLLINS, W. See COATNEY, G. R., et al.
- Cowell, R. E. See Greenstone, M. H., et al.
- Commoner, B. See Hauck, R. D., et al.
- Comparative virology, K. MARMOROSCH and E. KURSTAK (Eds.), book review by F. Fenner, 342
- Concanavalin A agglutination of intestinal cells from the human fetus, M. M. Weiser, 525
- Condeelis, J. See Jahn, T. L., et al.
- Conditioned approach and contact behavior toward signals for food or brain-stimulation reinforcement, G. B. Peterson et al., 1009
- CONTACOS, P. G. See COATNEY, G. R., et al.
- Contacos, P. G. See Schnitzer, B., et al.
- Contingent negative variation as an indicator of sexual object preference, R. M. Costell et al., 718
- Contraction in *Stentor coeruleus*: a cinematic analysis: E. Newman, 447
- Control of carcinogenesis: a possible role for the activated macrophage, J. B. Hibbs, Jr., et al., 998
- Conwell, E. See Baranger, E., et al.
- Cook, E. W., Demand for nuclear engineers (letter), 10
- Cooper, H. L. See Whitlock, J. P., Jr., et al.
- Coordinated development of  $\beta$ -glucuronidase and  $\beta$ -galactosidase in mouse organs, M. Meisler and K. Paigen, 894
- Coral chronometers: seasonal growth bands in reef corals, D. W. Knutson et al., 270
- Cornelius, E. A.: Rapid immunological induction of murine lymphomas: evidence for a viral etiology, 524
- Cornick, G. See Schevitz, R. W., et al.
- Cosmic plasma physics, K. SCHINDLER (Ed.), book review by R. M. Kulsrud, 1098
- Costell, R. M. et al.: Contingent negative variation as an indicator of sexual preference, 718
- COSTLOW, J. D., JR., Fertility of the sea, book review of, 253
- Councils of Urgent Studies, R. A. Cellarius and J. Platt, 670
- Covers: black-eyed susan (11 Aug.); catalyst surface in interference contrast (28 July); ciliated and nonciliated cells from hamster trachea (22 Sept.); electron micrograph of an erythrocyte (14 July); fossil pelobatid frog (18 Aug.); jumbled scene (7 July); non-motile vegetative cell of *Pyrocystis lunula* (8 Sept.); rat drinking from a stainless steel spout (1 Sept.); section of bent nylon fabric (25 Aug.); shadowgraph of shock waves (15 Sept.); single specimen of *Favia* coral (21 July); solar flare (29 Sept.); Wildcat Mountain Research Natural Area (4 Aug.)
- Cowan, T. A.: Paradoxes of science administration, 964
- Crabbe, J. C. See Alpern, H. P.
- Crabtree, R. E. See Lemberger, L., et al.
- Craig, P. P. See Stewart, C. A., Jr., et al.
- Crawford, E. C., Jr.: Brain and body temperatures in a panting lizard, 431
- Crawhall, J. C., and M. Banfalvi: Fabry's disease: differentiation between two forms of  $\alpha$ -galactosidase by myoinositol, 527
- Crustacean color-change hormone: amino acid sequence and chemical synthesis, P. Fernlund and L. Josefsson, 173
- Cuatrecasas, P. See Livingston, J. N., et al.
- Culliton, B. J. (News and Comment): acupuncture, 592; Baker to leave NIH for Hazleton Labs., 155; cancer virus theories, 44; Delaney clause relaxation considered, 414; DuVal as "top doctor," 976; federal advisory meetings opened to public, 412; graduate medical education plan, 40; Jackson Laboratory, 871; National Cancer Plan under review, 772, 1177; Pauling paper turned down by National Academy of Sciences, 409; Proceedings of the National Academy of Sciences has a face-lifting, 408; saccharin's future uncertain, 971; winterizing Woods Hole, 1173
- Curative potencies against  $\alpha$ -amanitin poisoning by cytochrome c, G. L. Floersheim, 808
- Cuticle deposition in imaginal disks: effects of juvenile hormone and fat body in vitro, H. Oberlander and C. Tomblin, 441
- Cyclic changes in insulin needs of an unstable diabetic, M. J. Campbell and B. W. Jones, 889
- Cytochalasin B prevents specific sorting of reaggregating embryonic cells, D. E. Maslow and E. Mayhew, 281
- Cytoplasmic genes and organelles, R. SAGER, book review by N. W. Gillham, 510
- D**
- D'ABRERA, B., Butterflies of the Australian region, book review of, 342
- Daily variation in concentration of cortisol in plasma in intact and hypophysectomized gulf killifish, A. K. Srivastava and A. H. Meier, 185
- Dallos, P., et al.: Cochlear inner and outer hair cells: functional differences, 356
- Dalzell, B. C. See Zitko, B. A., et al.
- Dalzell, H. C. See Zitko, B. A., et al.
- Danielli, J. F. See Dostrovsky, I., et al.
- Dating techniques for the archaeologist, H. N. MICHAEL and E. K. RALPH (Eds.), book review by R. E. Taylor, 419

- DAVENPORT, F. M. See NAGANO, Y.  
 Davis, K. H. See Perez-Reyes, M., et al.  
 Davis, W. J., and J. L. Ayers, Jr.: Locomotion: control by positive-feedback optokinetic responses, 183  
 Day, M. H.: book review of The functional and evolutionary biology of primates, 252  
 DDT toxicology (letters), P. F. Russell and S. S. Epstein, 387  
 Decreased RNA polymerase activity in mammalian zinc deficiency, M. W. Terhune and H. H. Sandstead, 68  
 Deficiency of kallikrein activity in plasma of patients with cystic fibrosis, G. J. S. Rao et al., 610  
 Deficits in feeding behavior after intraventricular injection of 6-hydroxydopamine in rats, M. J. Zigmond and E. M. Stricker, 1211  
 DeHaan, R. L. See Doane, W. W., et al.  
 Delmet, D. A. See Anstey, R. L.  
 De Maeyer-Guignard, J.: Mouse leukemia: depression of serum interferon production, 797  
 Demand for nuclear engineers (letter), E. W. Cook, 10  
 Dempster, A. P.: book review of Likelihood, 878  
 DEN BOER, P. J., and G. R. GRADWELL (Eds.), Dynamics of populations, book review of, 507  
 Desulfurization of coal, R. A. Meyers et al., 1187  
 Detection of molecular oxygen on Mars, N. P. Carleton and W. A. Traub, 988  
 Development of a receptor on a foreign nerve fiber in a Pacinian corpuscle, J. Schiff and W. R. Loewenstein, 712  
 Dewey, W. L. See Zitko, B. A., et al.  
 Diamond, I. T. See Casagrande, V. A., et al.  
 Dibutyl cyclic adenosine monophosphate stimulation of colcemid-inhibited axonal elongation, F. J. Roisen et al., 809  
 2,6-Dichlorophenol, sex pheromone of the lone star tick, R. S. Berger, 704  
 DICKINSON, C. H. See PREECE, T. F.  
 Dickson, E. M., et al.: Mercury and lead in the Greenland ice sheet: a reexamination of the data, 536  
 Dinman, B. D. See Horne, R. A., et al.  
 DNA polymerases from RNA tumor viruses and human cells: inhibition by polyuridylic acid, J. W. Abrell et al., 1111  
 Doane, W. W., et al.: Statement on termination of pregnancy, 477  
 Dobzhansky, Th.: Species of *Drosophila*, 664  
 Dr. Kinsey and the Institute for Sex Research, W. B. POMEROY, book review by F. A. Beach, 416  
 Dodge, M.: Forest fuel accumulation—a growing problem, 139  
 Donahue, R. P. See Nesbitt, M. N.  
 Donahue, T. M. See McElroy, M. B.  
 Dopamine: mediator of brain polysome disaggregation after L-dopa, B. F. Weiss et al., 613  
 Dostrovsky, I., et al.: Aharon Katzir-Katchalsky (letters), 9  
 Dott, R. H., Jr.: book review of The history of British geology, 507  
 Double moldavites in southern Bohemia, V. Bouška and R. Rost, 519  
 Dragoje, B. M. See Zeneveld, L. J. D., et al.  
 Duboff, G. S. See Pilgrim, H. I.  
 Dudley, P. P., and R. E. Riecker: Penrose conference on fracture mechanics and earthquake source mechanisms (meeting report), 87  
 Durick, M. A. See Ryan, W. L.  
 Durrant, J. D. See Dallos, P., et al.  
 Dutky, S. R. See Bowers, W. S., et al.  
 Dykstra, L. A., and J. B. Appel: Lysergic acid diethylamide and stimulus generalization: rate-dependent effects, 720

Dynamics of populations, P. J. DEN BOER and G. R. GRADWELL (Eds.), book review by H. S. Horn, 507

## E

- Eagen, M. See Mirvish, S. S., et al.  
 Early man's food habits (letters), C. B. Goodhart et al., 833  
 Earth and Mars: evolution of atmospheres and surface temperatures, C. Sagan and G. Mullen, 52  
 Earth sciences and the quality of life (editorial), P. H. Abelson, 947  
 Eccles, J. C. See Dostrovsky, I., et al.  
 Ecological assessment (letter), M. H. Greenstone et al., 210  
 Ecologists (letters), B. L. Welch and W. E. Westman, 115  
 Ecology of leaf surface micro-organisms, T. F. PREECE and C. H. DICKINSON (Eds.), book review by M. A. Stahmann, 785  
 Editorials: Behind the President's message, 13; Earth sciences and the quality of life, 947; Environmental quality, 655; The fourth revolution, 121; Mexican President Echeverría and science, 1063; The new physics report, 479; On growing old in America, 839; Research and planning, 565; Science and trans-science, 211; Shortchanging the disadvantaged student, 297; Two cooks for the same kitchen?, 1155; Understanding of science, 391; Where the action is, 747  
 Edwards, A. P. See Hauck, R. D., et al.  
 EDWARDS, A. W. F., Likelihood, book review of, 878  
 Eichelman, B. See Lamprecht, F., et al.  
 Eicher, L. D., and B. J. Zwolinski: Limitations of the Hildebrand-Batschinski shear viscosity equation, 369  
 18.6-year earth tide regulates geyser activity, J. S. Rinehart, 346  
 Eisner, T. See Thompson, W. R., et al.  
 Electron diffraction of wet proteins: catalase, V. R. Matricardi et al., 268  
 Eller, E. See Adler, I., et al.  
 Ellman, S. J. See Steiner, S. S.  
 Emerson, S. See Schindler, D. W., et al.  
*Emmonsia capsulata*: perfect state of *Histoplasma capsulatum*, K. J. Kwon-Chung, 368  
 Engel, W. K. See Roelofs, E. L., et al.  
 Enhancement of lobster growth, J. T. Hughes et al., 1110  
 Enriched predator-prey systems: theoretical stability, M. E. Gilpin and M. L. Rosenzweig, 902  
 Environmental quality (editorial), P. H. Abelson, 655  
 Epstein, S. S. See Russell, P. F.  
 Equal opportunity at NIH (letter), C. M. Berg, 474  
 Errata: for P. Pojeta, Jr., et al. (21 July, p. 264), 779; for W. B. Waranius (25 Aug., p. 653), 746  
 Eshel, Y. See Pinthus, M. J., et al.  
 Estes, R.: book review of Tertiary frogs from central Europe, 603  
 Etzioni, A. (editorial): Understanding of science, 391  
 Eutrophication and phosphate detergents, P. Godfrey and D. Mitchell, 816  
 Evidence for parathyroid failure in magnesium deficiency, C. S. Anast et al., 606  
 Evoked potential correlates of response criterion in auditory signal detection, D. D. Paul and S. Sutton, 362  
 Evolutionary clock: nonconstancy of rate in different species, T. H. Jukes and R. Holmquist, 530  
 Evolutionary taxonomy of culture, The, A. Lomax with N. Berkowitz, 228  
 Experimenters, The, W. E. K. MIDDLETON, book review by R. Hahn, 983  
 Eye marks in vertebrates as aids to vision, W. N. Charman et al., 367

## F

- Fabry's disease: differentiation between two forms of  $\alpha$ -galactosidase by myoinositol, J. C. Crawhall and M. Banfalvi, 527  
 Facilitation of the long-term store of memory with strychnine, H. P. Alpern and J. C. Crabbe, 722  
 Facilitation of recovery by  $\alpha$ -methyl-tyrosine after lateral hypothalamic damage, S. D. Glick et al., 534  
 Falgout, J. C. See Perry, N. W., Jr., et al.  
 Falk, J. L., et al.: Behavioral maintenance of high concentrations of blood ethanol and physical dependence in the rat, 811  
 Faulkerson, W. E. See Tyler, G. L., et al.  
 Federal statistics (letter), J. Shiskin, 474  
 Fein, R., and S. S. Lee: Medical school finances (letters), 293  
 Fernlund, P., and L. Josefsson: Crustacean color-change hormone: amino acid sequence and chemical synthesis, 173  
 Fertility impairment in mice on a low fluoride intake, H. H. Messer et al., 893  
 Fertility of the sea, J. COSTLOW, JR. (Ed.), book review by G. A. Riley, 253  
 Fetal liver erythropoiesis and yolk sac cells, D. E. Harrison et al., 187  
 Ficken, R. W. See Charman, W. N., et al.  
 Field and crop mutants with increased resistance to herbicides, M. J. Pinthus et al., 715  
 Filiz, R. See Isaila, M. V., et al.  
 Findeis, A. F.: Graduate education in science and engineering in Japan, 583  
 Fisher, N. S. See Adler, C., et al.  
 Fission in the evolution of a lizard karyotype, T. P. Webster et al., 611  
 Flannery, M. A. See Brower, L. P., et al.  
 Flavonols: pigments responsible for ultraviolet absorption in nectar guide of flower, W. R. Thompson et al., 528  
 Floersheim, G. L.: Curative potencies against  $\alpha$ -amanitin poisoning by cytochrome c, 808  
 Flood damage (letter), R. D. Acheson, 476  
 Fluorescent modification of adenosine 3', 5'-monophosphate: spectroscopic properties and activity in enzyme systems, J. A. Secrist III et al., 279  
 Flynn, J. P. See Bandler, R. J., Jr.  
 Foote, R. S.: Mercury vapor concentrations inside buildings, 513  
 Ford, L. A. See Tanner, J. T., et al.  
 Forest fuel accumulation—a growing problem, M. Dodge, 139  
 Forman, D. S., and R. W. Ledeen: Axonal transport of gangliosides in the goldfish optic nerve, 630  
 Fourth revolution, The (editorial), P. H. Abelson, 121  
 Fox, D. L.: book review of Carotenoids, 48  
 Frair, W., et al.: Body temperature of *Dermochelys coriacea*: warm turtle from cold water, 791  
 Francis, D. W. See Jahn, T. L., et al.  
 Frank, B., et al.: Memory transfer: correction, 638  
 Frantz, A. G. See Sassini, J. F., et al.  
 Free radical mechanisms in tissue injury, T. F. SLATER, book review by E. A. Smuckler, 1184  
 Freeland, P. E. See Voorhoeve, R. J. H., et al.  
 Freeman, A. E. See Price, P. J., et al.  
 Freeman, A. M., III, and R. H. Haveman: Residuals charges for pollution control: a policy evaluation, 322  
 FREEMAN, B. M. See BELL, D. J.  
 Freireich, E. J. See Gutterman, J. U., et al.  
 Frey, J., Technology assessment (letter), 116  
 Friedman, M. H. See Tanner, J. T., et al.



- Friedmann, E. I., *et al.*: Calcium oxalate crystals in the aragonite-producing green alga *Penicillus* and related genera, 891
- Friesen, H. G. See Tyson, J. E., *et al.*
- Frommer, G. P. See Peterson, G. B., *et al.*
- Fuller, C. W., *et al.*: Particulate bioluminescence in dinoflagellates: dissociation and partial reconstitution, 884
- Fullmer, H. M. See Robertson, P. B., *et al.*
- Functional and evolutionary biology of primates, The, R. TUTTLE (Ed.), book review by M. H. Day, 252
- G**
- Gabor, D.: Holography, 1948-1971, 299
- Galanter, M. See Wyatt, R. J., *et al.*
- Gallant, J. See Meier, R. L., *et al.*
- Gallo, R. C. See Abrell, J. W., *et al.*
- Galston, A. W. See Lewis, H. J.
- Gans, C.: book review of The temperature and water relations of reptiles, 420
- Garnham, P. C. C.: book review of The primate malaras, 50
- Garwin, R. L. See Thun, R. E.
- GASHUS, O. K. See Gray, T. J.
- Geckeler, W. R. See Blomberg, B., *et al.*
- Gelboin, H. V. See Whitlock, J. P., Jr., *et al.*
- Gene differences between Caucasian, Negro, and Japanese populations, M. Nei and A. K. Roychoudhury, 434
- Genesis of quantum theory, The (1899-1913), A. HERMANN, book review by M. J. Klein, 418
- Genetic determination of phenotypic variation in sickle cell trait, W. E. Nance and J. Grove, 716
- Genetic meaning of zooecial chamber shapes in fossil bryozoans: Fourier analysis, R. L. Anstey and D. A. Delmet, 1000
- Genetics of the antibody response to dextran in mice, B. Blomberg *et al.*, 178
- George, D. A. See McDonough, L. M., *et al.*
- Gerard, J. See Adler, I., *et al.*
- Gibbon, R. J. See Williams, R. C.
- GIBBS, M. (Ed.), Structure and function of chloroplasts, book review of, 510
- Gillette, R. (News and Comment): Council on Environmental Quality and secret papers, 38; fall of Phillips Nuclear, 868; minorities in the geosciences, 148; nuclear safety, 330, 771, 867, 970, 1080; NAS food committees, 1172; October summit for science, 501; Ray nominated to AEC, 246
- Gillham, N. W.: book review of Cytoplasmic genes and organelles, 510
- Gilman, A. G. See Secrist, J. A., III, *et al.*
- Gilpin, M. E., and M. L. Rosenzweig: Enriched predator-prey systems: theoretical stability, 902
- Glew, D. H. See Hollinshead, A. C., *et al.*
- Glick, S. D., *et al.*: Facilitation of recovery by  $\alpha$ -methyl-p-tyrosine after lateral hypothalamic damage, S. D. Glick *et al.*, 534
- Glomski, C. A. See Gong, J. K., *et al.*
- Godfrey, P., and D. Mitchell: Eutrophication and phosphate detergents, 816
- Gold, P. See Hollinshead, A. C., *et al.*
- Goldberg, A. M. See Spyker, J. M., *et al.*
- Goldberg, E. D. See Dickson, E. M., *et al.*
- Golden lion marmoset conference (meeting report), S. H. Hampton, 86
- Goldfish retina: sign of the rod input in opponent color ganglion cells, J.-P. Raynaud, 84
- Goldhaber, S. Z. (News and Comment): medical school admissions, 332
- GOLDRING, G., and R. KALISH (Eds.), Hyperfine interactions in excited nuclei, book review of, 985
- Goldsmith, H.: An olympiad of science, 35
- GOLDTHWAIT, R. F. (Ed.), Till, book review of, 879
- Gómez-Pompa, A., *et al.*: The tropical rain forest: a nonrenewable resource, 762
- Gong, J. K., *et al.*: Anemic stress as a trigger of myelogenous leukemia in the unirradiated RF mouse, 274
- Goodhart, C. B., *et al.*: Early man's food habits (letters), 833
- Goodman, D. A.: Suffering legions (letter), 210
- Gorenstein, P. See Adler, I., *et al.*
- Gotts, E. E. See Illingworth, R. S., *et al.*
- GOULD, G. W. See BARKER, A. N., *et al.*
- Gouras, P., and P. O. Bishop: Neural basis of vision (meeting report), 188
- Gourevitch, G. See Miller, J. M., *et al.*
- Graduate education (letter), R. Roy, 1060
- Graduate education in science and engineering in Japan, A. F. Findeis, 583
- GRADWELL, G. R. See DEN BOER, P. J.
- GRANITI, A. See WOOD, R. K. S., *et al.*
- GRANT, V.: Plant speciation, book review of, 600
- GRAY, T. J., and O. K. GASHUS (Eds.), Tidal power, book review of, 783
- Green, R. See Wyatt, R. J., *et al.*
- Greenstein, S. See Glick, S. D., *et al.*
- Greenstone, M. H., *et al.*: Ecological assessment, (letter), 210
- Greguss, P., and H. J. Caulfield: Multiplexing ultrasonic wave fronts by holography, 422
- Grey, D. C., and M. L. Jensen: Bacteriophage sulfur in air pollution, 1099
- Griffith, B. C., and N. C. Mullins: Coherent social groups in scientific change, 959
- Grigas, E. O.: Retreat (letter), 746
- Grobman, A. B. (editorial): Shortchanging the disadvantaged student, 297
- Grove, J. See Nance, W. E.
- Growth and structure of human populations, The, A. J. COALE, book review by N. J. N. Hobcraft, 1094
- Growth of the university (letters), R. L. Meier *et al.*, 943
- GRZIMEK, B. (Ed.), Grzimek's animal life encyclopedia, book review of, 1184
- Grzimek's animal life encyclopedia, B. GRZIMEK (Ed.), book review by R. H. Manville, 1184
- Guevara, S. See Gómez-Pompa, A., *et al.*
- Gursky, H. See Adler, I., *et al.*
- Gutterman, J. U., *et al.*: Antigen solubilized from human leukemia: lymphocyte stimulation, 1114
- GUTTMAN, H. See ISLER, O., *et al.*
- Gwilliam, G. F. See Millecchia, R.
- Gypsy moth control with the sex attractant pheromone, M. Beroza and D. F. Knippling, 19
- H**
- Habal, M. B. See Blatt, C. M., *et al.*
- Haber, E. See Miller, E. D., Jr., *et al.*
- Habermann, E.: Bee and wasp venoms, 314
- Hafele, J. C., and R. E. Keating: Around-the-world atomic clocks: observed relativistic time gains, 168; Around-the-world atomic clocks: predicted relativistic time gains, 166
- Hahn, R.: book review of The experimenters, 983
- Halberg, F. See Haus, E., *et al.*
- Hall, M. M. See Türker, R. K., *et al.*
- Hall, W. C. See Casagrande, V. A., *et al.*
- Hall, W. P. See Webster, T. P., *et al.*
- HAMBURGH, M., and E. J. W. BARRINGTON (Eds.), Hormones in development, book review of, 785
- Hamersma, J. W. See Meyers, R. A., *et al.*
- Hammond, A. L. (Research News): energy, 875, 978 (geothermal), 1088 (solar); Physics in Perspective, 597
- Hammond, D. M.: book review of Life cycles of Coccidia of domestic animals, 1095
- Hammond, G. M.: book review of Photochemistry and spectroscopy, 1097
- Hammond, P. B., *et al.*: Report on airborne lead (letters), 10
- Hammond, R. P. See Starr, C.
- Hampton, S. H.: Golden lion marmoset conference (meeting report), 86
- Hanafusa, H., *et al.*: Absence of polymerase protein in virions of alpha-type Rous sarcoma virus, 1188
- Hanson, R. S.: book review of Spore research 1971, 1096
- Hapke, B.: Reflection spectra of lunar dust grains with amorphous coatings, 535
- Harleman, D.: book review of Tidal power, 783
- Harman, T. C. See Blum, F. A., *et al.*
- Harris, B. See Adler, I., *et al.*
- Harris, C. C. See Kaufman, D. G., *et al.*
- Harris, L. S. See Zitko, B. A., *et al.*
- Harrison, D. E., *et al.*: Fetal liver erythropoiesis and yolk sac cells, 187
- Harting, J. K. See Casagrande, V. A., *et al.*
- Hartshorn, J. H.: book review of Till, 879
- Harvey, G. R. See Carpenter, E. J., *et al.*
- HATCH, M. A., *et al.* (Eds.), Photosynthesis and photorespiration, book review of, 690
- Hauck, R. D., *et al.*: Use of variations in natural nitrogen isotope abundance for environmental studies: a questionable approach, 453
- Haus, E., *et al.*: Increased tolerance of leukemic mice to arabinosyl cytosine with schedule adjusted to circadian system, 80
- Haveman, R. H. See Freeman, A. M., III
- Hawkes, N. (News and Comment): research councils in Britain lose some autonomy, 410
- HAYS, J. F. See ROBERTSON, E. C., *et al.*
- Hazlewood, C. F.: Pumps or no pumps, 815
- Hearst, E. S. See Peterson, G. B., *et al.*
- Heat capacity of superconducting ternary molybdenum sulfides, R. Viswanathan and A. C. Lawson, 267
- Heidel, K.: Turbidity trends at Tucson, Arizona, 882
- Heimann, H. See Hammond, P. B., *et al.*
- HELLER, H., and K. LEDERIS (Eds.), Subcellular organization and function in endocrine tissues, book review of, 94
- HEMMING, C. F., and T. H. C. TAYLOR (Eds.), Proceedings of the international study conference on the current and future problems of acridology, book review of, 984
- Hemoglobin adaptation for fast and slow water habitats in sympatric catostomid fishes, D. A. Powers, 360
- Hempelmann, L. See Michels, D. E., *et al.*
- Henderson, W. R. See Kaufman, D. G., *et al.*
- Herberman, R. B. See Hollinshead, A. C., *et al.*
- Herbert, E. See Woodward, W. R.
- Herbicide study (letters), H. J. Lewis and A. W. Galston, 745
- HERMANN, A.: The genesis of quantum theory (1899-1913), book review of, 418
- Herpes-type virus particles associated with a fungus, F. Y. Kazama and K. L. Schormstein, 696
- Hersey, D. See Ripley, S. D., *et al.*
- Hersh, E. M. See Gutterman, J. U., *et al.*
- Herzberg, G.: Spectroscopic studies of molecular structure, 123
- Heslop-Harrison, J.: book review of Plant speciation, 600
- Hibbs, J. B., Jr., *et al.*: Control of carcinogenesis: a possible role for the activated macrophage, 998
- Hildebrand, J. H.: Organic gardening (letter), 944
- Hill, K. R. See McDonough, L. M., *et al.*
- Histochemical phosphorylase activity in regenerating muscle fibers from myo-



- phosphorylase-deficient patients, R. I. Roelofs *et al.*, 795
- History of British geology, The, J. CHALLINOR, book review by R. H. Dott, Jr., 507
- History, philosophy, and sociology of science (AAAS), 1216
- HITCHCOCK, C., and B. W. NICHOLS, Plant lipid biochemistry, book review of, 511
- Ho, W. K. L. See Ockner, R. K., *et al.*
- Hobcraft, J. N.: book review of The growth and structure of human populations, 1094
- Hoch, G. E.: book review of Photosynthesis and photorespiration and Photosynthesis, photorespiration, and plant productivity, 690
- HODSON, F. R., *et al.* (Eds.), Mathematics in the archaeological and historical sciences, book review of, 1185
- Hoffer, B. J. See Bloom, F. E., *et al.*
- Hoffman, G. J., and S. L. Rawlins: Silver-foil psychrometer for measuring leaf water potential in situ, 802
- Holden, C. (News and Comment): Agnes imperils Chesapeake bivalves, 149; American Littoral Society, 682; blood banks to be regulated by Food and Drug Administration, 869; Council on Environmental Quality's third report, 593; Erlich versus Commoner, 245; methadone distribution tightened, 502; Nader on mental health centers, 413; NSF budget held down; Nixon vetoes HEW bill 775; population committee launched, 1178; shark tagging, 681; science policy-making fellowships, 1084; world ethics body proposed, 1174
- Hollinshead, A. C., *et al.*: Separation of skin reactive intestinal cancer antigen from the carcinoembryonic antigen of Gold, 887
- Holmes, D. S., *et al.*: Chromosomal RNA: its properties, 72
- Holmquist, R. See Jukes, T. H.
- Holography, 1948-1971, D. Gabor, 299
- Hormones in development, M. HAMBURGH and E. J. W. BARRINGTON (Eds.), book review by R. T. Schimke, 785
- Horn, H. S.: book review of Dynamics of populations, 507
- HORNE, R. A. (Ed.), Water and aqueous solutions, book review of, 784
- Horne, R. A., *et al.*: Biological effects of chemical agents (letters), 1152
- Horrocks, W. DeW., Jr., and J. P. Sipe, III: Lanthanide complexes as nuclear magnetic resonance structural probes: paramagnetic anisotropy of shift reagent adducts, 994
- Horton, J. E., *et al.*: Bone resorbing activity in supernatant fluid from cultured human peripheral blood leukocytes, 793
- Horwich, R. See Charman, W. N., *et al.*
- Hough, R. R. See Meier, R. L., *et al.*
- How animals work, K. SCHMIDT-NIELSEN, book review by J. E. Bardach, 1183
- How the Chinese scientist survives, L. A. Orleans, 864
- Howard, R.: Recent solar research, 1157
- Howes, J. F. See Zitko, B. A., *et al.*
- Huang, J. C. K. See Namias, J.
- Huebner, R. J. See Whitmire, C. E.
- Huffman, J. H. See Sidwell, R. W., *et al.*
- Hughes, J. T., *et al.*: Enhancement of lobster growth, 1110
- Hukins, D. W. L. See Arnott, S., *et al.*
- Human cost of nuclear power, L. A. Sagan, 487
- Human insulin: facile synthesis by modification of porcine insulin, M. A. Ruttenberg, 623
- Human lactational and ovarian response to endogenous prolactin release, J. E. Tyson *et al.*, 897
- Human prolactin: 24-hour pattern with increased release during sleep, J. F. Sassin *et al.*, 1205
- Hwang, D. S. See Haus, E., *et al.*
- 11-Hydroxy- $\Delta^8$ -tetrahydrocannabinol: pharmacology, disposition, and metabolism of a major metabolite of marihuana in man, L. Lemberger *et al.*, 62
- HYNEK, J. A.: The UFO experience, book review of, 688
- Hyperfine interactions in excited nuclei, G. GOLDRING and R. KALISH (Eds.), book review by P. Stelson, 985
- I**
- Idler, D. R.: book review of Steroid protein interactions, 509
- Illingworth, R. S., *et al.*: Newborn walking (letters), 1057
- Immunology and genetics (meeting report), G. S. Omenn and H. O. McDevitt, 904
- Increased tolerance of leukemic mice to arabinosyl cytosine with schedule adjusted to circadian system, E. Haus *et al.*, 80
- Indole-3-acetic acid in human cerebrospinal fluid: identification and quantification by mass fragmentography, L. Bertilsson and L. Palmer, 74
- Information services (letters), S. D. Ripley *et al.*, 473
- Inhibition of angiotensin conversion in experimental renovascular hypertension, E. D. Miller, Jr., *et al.*, 1108
- Inhibition of bacterial adherence by secretory immunoglobulin A: a mechanism of antigen disposal, R. C. Williams and R. J. Gibbons, 697
- Inhibition of chemical carcinogenesis by viral vaccines, C. E. Whitmire and R. J. Huebner, 60
- Insulin insensitivity of large fat cells, J. N. Livingston *et al.*, 626
- International science and technology (AAAS), 1128
- Intestinal uptake of macromolecules: effect of oral immunization, W. A. Walker *et al.*, 608
- Intravenous injection in man of  $\Delta^8$ -tetrahydrocannabinol and 11-OH- $\Delta^8$ -tetrahydrocannabinol, M. Perez-Reyes *et al.*, 633
- Introduction to Newton's 'Principia', I. B. COHEN, book review by M. S. Mahoney, 340
- Invertebrate tissue culture, c. VAGO (Ed.), book review by I. Schneider, 252
- Isaac Newton's *Philosophiae naturalis principia mathematica*, A. KOYRÉ and I. B. COHEN (Eds.), book review by M. S. Mahoney, 340
- Isabelle, E. See Leibowitz, H. W., *et al.*
- Isaia, M. V., *et al.*: Acceleration of argon ions to  $1.17 \times 10^{10}$  electron volts, 424
- ISLER, O., *et al.* (Eds.), Carotenoids, book review of, 48
- Isomorphous heavy atom derivative of crystalline formylmethionine transfer RNA, An, R. W. Schevitz *et al.*, 429
- Isselbacher, K. J. See Walker, W. A., *et al.*
- J**
- Jaffee, M. See Tanner, J. T., *et al.*
- Jahn, T. L., *et al.*: Capillary suction test of the pressure gradient theory of amoeboid motion, 636
- JEFFERS, J. N. R. (Ed.), Mathematical models in ecology, book review of, 981
- Jensen, M. L. See Grey, D. C.
- Jöschle, W. See Tolcott, M. A., *et al.*
- John, E. R.: Switchboard versus statistical theories of learning and memory, 850
- Johnson, C. A. See Leibowitz, H. W., *et al.*
- Johnson, H. A. See Stewart, C. A., Jr., *et al.*
- Johnson, N. M., *et al.*: Atmospheric sulfur: its effect on the chemical weathering of New England, 514
- Jones, B. W. See Campbell, M. J.
- Josefsson, L. See Fernlund, P.
- JOVANOVIĆ, U. J.: Normal sleep in man, book review of, 159
- Jukes, T. H., and R. Holmquist: Evolutionary clock: nonconstancy of rate in different species, 530
- K**
- Kafotis, F. See Doane, W. W., *et al.*
- KALISH, R. See GOLDRING, G.
- Kapen, S. See Sassin, J. F., *et al.*
- Kaplan, J. See Wyatt, R. J., *et al.*
- Kaplan, S. L. See Anast, C. S., *et al.*
- Kaufmann, D. G., *et al.*: RNA metabolism in tracheal epithelium: alteration in hamsters deficient in vitamin A, 1105
- Kazama, F. Y., and K. L. Schornstein: Herpes-type virus particles associated with a fungus, 696
- Keating, R. E. See Hafele, J. C.
- Keeney, D. R. See Hauck, R. D., *et al.*
- Kelley, P. L. See Blum, F. A., *et al.*
- KENDALL, D. G. See HODSON, F. R., *et al.*
- Kenyon, N. D. See Kreuzer, L. B., *et al.*
- Kerridge, J. F., and J. F. Vedder: Accretionary processes in the early solar system: an experimental approach, 161
- KERSLAKE, D. MCK.: The stress of hot environments, book review of, 1096
- Khare, G. P. See Sidwell, R. W., *et al.*
- KHEYSIN, Y. M.: Life cycles of Coccidia of domestic animals, book review of, 1095
- KHUDOLEV, K. M., and A. A. MEYERHOFF, Paleogeography and geological history of Greater Antilles, book review of, 782
- Kim, S.-H. See Seeman, N. C., *et al.*
- Kirby, G. S. See Jahn, T. L., *et al.*
- Klein, D. C., and J. L. Weller: Rapid light-induced decrease in pineal serotonin N-acetyltransferase activity, 532
- Klein, M. J.: book review of The genesis of quantum theory (1899-1913), 418
- KLIR, G. J. (Ed.), Trends in general systems theory, book review of, 508
- Klots, A. B.: book review of Australian butterflies and Butterflies of the Australian region, 342
- Knapp, S., and A. J. Mandell: Narcotic drugs: effects on the serotonin biosynthetic systems of the brain, 1209
- Knippling, E. F. See Beroza, M.
- KNOPOFF, L. See ROBERTSON, E. C., *et al.*
- Knutson, D. W., *et al.*: Coral chronometers: seasonal growth bands in reef corals, 270
- Kobayashi, G. S., *et al.*: Amphotericin B potentiation of rifampicin as an antifungal agent against the yeast phase of *Histoplasma capsulatum*, 709
- Kohl, D. H. See Hauck, R. D., *et al.*
- Koide, M. See Dickson, E. M., *et al.*
- Kolb, S. See Illingworth, R. S., *et al.*
- Kom Ombo: preliminary report on the fauna of late Paleolithic sites in Upper Egypt, C. S. Churcher and P. E. L. Smith, 259
- Kopell, B. S. See Costell, R. M., *et al.*
- Kopin, I. J. See Lamprecht, F., *et al.*
- KOYRÉ, A., and I. B. COHEN (Eds.), Isaac Newton's *Philosophiae naturalis principia mathematica*, book review of, 340
- Kraft, M. L. See Meyers, R. A., *et al.*
- KRAUS, E. B.: Atmosphere-ocean interaction, book review of, 982
- Kreiss, P. See Fuller, C. W., *et al.*
- Kreuzer, L. B., *et al.*: Air pollution: sensitive detection of ten pollutant gases by carbon monoxide and carbon dioxide lasers, 347
- Kühl, J. F. W. See Haus, E., *et al.*
- KULSRUD, R. M.: book review of Cosmic plasma physics, 1098
- Kwan, C. N. See Kobayashi, G. S., *et al.*
- Kwon Chung, K. J.: *Emmonsia capsulata*: perfect state of *Histoplasma capsulatum*, 368

## L

- LADURIE, E. L., Times of feast, times of famine, *book review of*, 982
- Lambert, L. H., Jr. See Hibbs, J. B., Jr., *et al.*
- Lamothe, R. See Adler, I., *et al.*
- Lamprecht, F., *et al.*: Rat fighting behavior: serum dopamine- $\beta$ -hydroxylase and hypothalamic tyrosine hydroxylase, 1214
- Land, J. S. See Meyers, R. A., *et al.*
- Landmesser, L. See Pilar, G.
- Langham, W. H. See Michels, D. E., *et al.*
- Lanthanide complexes as nuclear magnetic resonance structural probes: paramagnetic anisotropy of shift reagent adducts, W. DeW. Horrocks, Jr., and J. P. Sipe, III, 994
- Lawson, A. C. See Viswanathan, R.
- Laxton, R. R.: *book review of* Mathematics in the archaeological and historical sciences, 1185
- Lead poisoning: rapid formation of intranuclear inclusions, D. D. Choie and G. W. Richter, 1194
- Learning and the human sciences (AAAS), 1127
- Lectins: cell-agglutinating and sugar-specific proteins. H. Sharon and H. Lis, 949
- Ledeer, R. W. See Forman, D. S.
- LEDERIS, K. See HELLER, H.
- Lee, R. F., *et al.*: Petroleum hydrocarbons: uptake and discharge by the marine mussel *Mytilus edulis*, 344
- Lee, S. S. See Fein, R.
- Legg, J. O. See Hauck, R. D., *et al.*
- Lemberger, L., *et al.*: 11-Hydroxy- $\Delta^8$ -tetrahydrocannabinol: pharmacology, disposition, and metabolism of a major metabolite of marijuana in man, 62
- Leonard, N. J. See Secrist, J. A., III, *et al.*
- Leopold, A. C. See Goodhart, C. B., *et al.*
- Lester, D. See Wigner, E. P.
- Lev, R., and D. Orlic: Protein absorption by the intestine of the fetal rat in utero, 522
- Levin, Z. See Scott, W. D.
- Levine, E. M. See Miller, C. A.
- LEVITT, J., Responses of plants to environmental stresses, *book review of*, 786
- Lewis, H. J., and A. W. Galston: Herbicide study (*letters*), 745
- Lewontin, R. C., *et al.*: The uses of knowledge (*letters*), 386
- Life cycles of Coccidia of domestic animals, Y. M. KHEYSIN, *book review of* D. M. Hammond, 1095
- Life puzzle, The, A. G. CAIRNS-SMITH, *book review of* S. L. Miller, 602
- Likelihood, A. W. F. EDWARDS, *book review of* A. P. Dempster, 878
- Likens, G. E. See Johnson, N. M., *et al.*
- Limit cycles in predator-prey communities, R. M. May, 900
- Limit on tax exclusion (*letter*), E. N. Brewer, 836
- Limitations of the Hildebrandt-Batschinski shear viscosity equation, L. D. Eicher and B. J. Zwolinski, 369
- Lincoln, D. N. See Tanner, J. T., *et al.*
- Lipton, M. A. See Perez-Reyes, M., *et al.*
- Lis, H. See Sharon, H.
- Lisk, D. J. See Bache, C. A., *et al.*
- Livingston, J. N., *et al.*: Insulin insensitivity of large fat cells, 626
- Lockertz, W. See Horne, R. A., *et al.*
- Lockwood, D. H. See Livingston, J. N., *et al.*
- Locomotion: control by positive-feedback optokinetic responses, W. J. Davis and J. L. Ayers, Jr., 183
- Locomotion: energy cost of swimming, flying, and running, K. Schmidt-Nielsen, 222
- Loewenstein, W. R., See Schiff, J.
- Loh, H. H. See Wei, E., *et al.*
- Lomax, A., with N. Berkowitz, The evolutionary taxonomy of culture, 228

- LOVESEY, S. W. See MARSHALL, W.
- Lowman, P. See Adler, I., *et al.*
- Lucas, A. M.: *book review of* Physiology and biochemistry of the domestic fowl, 690
- Lunar studies (*letter*), F. B. Waranius, 652; *erratum*, 746
- Lunde, D. T. See Costell, R. M., *et al.*
- Lyman, H.: *book review of* Structure and function of chloroplasts, 510
- Lysergic acid diethylamide and stimulus generalization: rate-dependent effects, L. A. Dykstra and J. B. Appel, 720

## M

- Machina carnis, D. M. NEEDHAM, *book review of* W. F. H. M. Mommaerts, 877
- Mackie, G. O.: *book review of* The anatomy of the nervous system of *Octopus vulgaris*, 1183
- MacLean, P. D.: *book review of* Neuron structure of the brain, 691
- Maesen, S. J. See Maesen, W. A.
- Maesen, W. A., and S. J. Maesen: Academic "soul searching" (*letter*), 293
- Maggiore, C. J. See Nicholson, W. J., *et al.*
- Mahler, H. R. See Raff, R. A.
- Mahoney, M. S.: *book review of* Introduction to Newton's 'Principia' and Isaac Newton's *Philosophiae naturalis principia mathematica*, 340
- Maize and its wild relatives, H. G. Wilkes, 1071
- Mandell, A. J. See Knapp, S.
- Manning, J. A. See Ockner, R. K., *et al.*
- Manville, R. H.: *book review of* Grzimek's animal life encyclopedia, 1184
- MARAMOROSCH, K., and E. KURSTAK (Eds.), Comparative virology, *book review of*, 342
- Marks, P. A. See Harrison, D. E., *et al.*
- MARSHALL, W., and S. W. LOVESEY, Theory of thermal neutron scattering, *book review of*, 50
- Martin, G. F. See Casagrande, V. A., *et al.*
- Marx, J. L. (*Research News*): Prostaglandins: mediators of inflammation?, 780
- Maslow, D. E., and E. Mayhew: Cytochalasin B prevents specific sorting of reaggregating embryonic cells, 281
- Mathematical models in ecology, J. N. R. JEFFERS (Ed.), *book review of* E. C. Pielou, 981
- Mathematics in the archaeological and historical sciences, F. R. HODSON *et al.* (Eds.), *book review of* R. R. Laxton, 1185
- Matricardi, V. R.: Electron diffraction of wet proteins: catalase, 268
- Matter of high priority, A: IV jornada de flora y fauna Amazonica (*meeting report*), M. Buchinger, 189
- Matthiae, P. E. See Charman, W. N., *et al.*
- Matthias, B. T.: See Voorhoeve, R. J. H., *et al.*
- Maugh, T. H., II (*Research News*), air pollution instrumentation, 685, 1090; carbon monoxide's natural sources dwarf man's output, 338; narcotic antagonists and the accelerated search, 249
- Maus, E. A., and G. G. Berg: Stockholm conference (*letters*), 746
- Mavligit, G. See Gutterman, J. U., *et al.*
- May, R. M.: Limit cycles in predator-prey communities, 900
- Mayer, J. W. See Nicolet, M.-A., *et al.*
- Mayfield, J. E. See Holmes, D. S., *et al.*
- Mayhew, E. See Maslow, D. E.
- Mayr, E. See Collette, B. B., *et al.*
- McConnell, R. A. See Tolcott, M. A., *et al.*
- McCredie, K. B. See Gutterman, J. U., *et al.*
- MC CUBBIN, C., Australian butterflies, *book review of*, 342
- McDevitt, H. O. See Omenn, G. S.
- McDonough, L. M., *et al.*: Sex pheromone of the codling moth: structure and synthesis, 177
- McElroy, M. B., and T. M. Donahue: Stability of the martian atmosphere, 986
- McEvoy, P. B. See Brower, L. P., *et al.*
- McEwen, R. S. See Friedmann, E. I., *et al.*
- MC GIMSEY, C. R., III, Public archeology, *book review of*, 1097
- McGinness, J. E.: Mobility gaps: a mechanism for band gaps in melanins, 896
- McIntire, M. S., and C. R. Angle: Air Lead: relation to lead in blood of black school children deficient in glucose-6-phosphate dehydrogenase, 520
- MC KERNS, K. W. (Ed.), The sex steroids, *book review of*, 158
- McNulty, P. J. See Isaila, M. V., *et al.*
- MC WILSON, W. See COATNEY, G. R., *et al.*
- McWright, C. G. See Hollinshead, A. C., *et al.*
- Mead, M. L. See Schnitzer, B., *et al.*
- Medical school finances (*letters*), R. Fein and S. S. Lee, 293
- Medoff, G. See Kobayashi, G. S., *et al.*
- Meeting Reports: Golden lion marmoset conference, 86; Immunology and genetics, 904; A matter of high priority: IV jornada de flora y fauna Amazonica, 189; Neural basis of vision, 188; Penrose conference on fracture mechanics and earthquake source mechanisms, 87; Progress in luminescence dosimetry, 539
- Meier, A. H. See Srivastava, A. K.
- Meier, R. L., *et al.*: Growth of the university (*letters*), 943
- Meinwald, J. See Thompson, W. R., *et al.*
- Meisler, M., and K. Paigen: Coordinated development of  $\beta$ -glucuronidase and  $\beta$ -galactosidase in mouse organs, 894
- Meksuwan, K. See Mufson, D., *et al.*
- Melmon, K. L., *et al.*: Receptors for histamine can be detected on the surface of selected leukocytes, 707
- Memory transfer: correction, B. Frank *et al.*, 638
- Mercury and lead in the Greenland ice sheet: a reexamination of the data, E. M. Dickinson *et al.*, 536
- Mercury content of common foods determined by neutron activation analysis, J. T. Tanner *et al.*, 1102
- Mercury vapor concentrations inside buildings, R. S. Foote, 513
- Mergenhausen, S. E. See Horton, J. E., *et al.*
- Messer, H. H., *et al.*: Fertility impairment in mice on a low fluoride intake, 893
- Metz, W. D. (*News and Comment*): High Voltage Engineering Corporation, 151; (*Research News*): astronomy has a new golden age, 247; gravity waves, 506; laser fusion, 1180; x-rays from heavy ions, 156
- Mexican President Echeverria and science (*editorial*), G. T. Seaborg, 1063
- MEYERHOFF, A. A. See KHUDDLEY, K. M.
- Meyers, R. A., *et al.*: Desulfurization of coal, 1187
- MICHAEL, H. N., and E. K. RALPH (Eds.), Dating techniques for the archaeologist, *book review of*, 419
- Michels, D. E., *et al.*: Plutonium plant safety (*letters*), 208
- Microanalysis of materials by backscattering spectrometry, M.-A. Nicolet *et al.*, 841
- Microtubule formation in vitro in solutions containing low calcium concentrations, R. C. Weisenberg, 1104
- MIDDLETON, W. E. K., The experimenters, *book review of*, 983
- Miklas, H. P. See Carpenter, E. J., *et al.*



- Military spending (*letters*), R. E. Thun and R. L. Garwin, 833
- Millecchia, R., and G. F. Gwilliam: Photoreception in a barnacle: electrophysiology of the shadow reflex pathway in *Balanus cariosus*, 438
- Miller, C. A., and E. M. Levine: Neuroblastoma: synchronization of neurite outgrowth in cultures grown on collagen, 799
- Miller, E. D., Jr., et al.: Inhibition of angiotensin conversion in experimental renovascular hypertension, 1108
- Miller, J. M., et al.: Single cells activity in the auditory cortex of rhesus monkeys: behavioral dependency, 449
- Miller, R. R. See Springer, A. D.
- Miller, R. W. See Waters, T. D., et al.
- Miller, S. L.: *book review* of The life puzzle and The origin of life by natural causes, 602
- Mirvish, S. S., et al.: Ascorbate-nitrite reaction: possible means of blocking the formation carcinogenic N-nitroso compounds, 65
- Mitchell, D. See Godfrey, P.
- Mitchell, G. C. See Thompson, R. D., et al.
- Mitchell, I. V. See Nicolet, M.-A., et al.
- Mobility gaps: a mechanism for band gaps in melanins, J. E. McGinness, 896
- Mock, J. E.: Where the action is (*editorial*), 747
- Mohs, J. M. See Anast, C. S., et al.
- Moir, W. H.: Natural areas, 396
- Mommaerts, W. F. H. M.: *book review* of Machina carnis, 877
- More is different, P. W. Anderson, 393
- Morell, A. G. See Okereke, T., et al.
- Moretz, R. C. See Matricardi, V. R., et al.
- Morkovin, M. W., and Siegel, R. T.: Uses of research (*letters*), 652
- Morris, N. J. See Pojeta, J., Jr., et al.
- Moses, L. E.: The response of graduate enrollment to placement opportunities, 494
- Mosser, J. L. See Adler, C., et al.
- Mouse leukemia: depression of serum interferon production, J. De Maeyer-Guignard, 797
- Mrosovsky, N. See Frair, W., et al.
- Mudd, J. B.: *book review* of Plant lipid biochemistry, 511
- Mufson, D., et al.: Cholesterol solubility in lecithin-bile salt systems, 701
- Mullen, G. See Sagan, C.
- Mullins, D. E., and Cochran, D. B.: Nitrogen excretion in cockroaches: uric acid is not a major product, 699
- Mullins, N. C. See Griffith, B. C., et al.
- Mulloney, B., and A. Selverston: Antidromic action potentials fail to demonstrate known interactions between neurons, 69
- Multiplexing ultrasonic wave fronts by holography, P. Greguss and H. J. Caulfield, 422
- Munro, H. N. See Weiss, B. F., et al.
- Munson, T. O., and R. Burnett: PCB's in sand crabs (*letters*), 652
- Murphy, R. A. See Roisen, F. J., et al.
- Murray, B. C.: *book review* of The UFO experience, 688
- Musser, W. E. See Kobayashi, G. S., et al.
- N
- Nadler, H. L. See Rao, G. J. S., et al.
- NAGANO, Y., and F. M. DAVENPORT (Eds.), Rabies, *book review* of, 984
- Nagel, T.: Reason and national goals, 766
- Nagle, F.: *book review* of Paleogeography and geological history of Greater Antilles, 782
- Nagpal, K. L. See Nagyvary, J.
- Nagyvary, J., and K. L. Nagpal: Oligothymidylates: formation by thermal condensation of O<sup>6</sup>,5'-cyclothymidine 3'-phosphate, 272
- Namias, J., and J. C. K. Huang: Sea level at southern California: a decadal fluctuation, 351
- Nance, W. E., and J. Grove: Genetic determination of phenotypic variation in sickle cell trait, 716
- Narasimhan, R. See Barlow, H. B., et al.
- Narcotic antagonists (*letter*), M. M. Baden, 1152
- Narcotic drugs: effects on the serotonin biosynthetic systems of the brain, S. Knapp and A. J. Mandell, 1209
- Natural areas, W. H. Moir, 396
- Nature of the solid earth, The, E. C. ROBERTSON et al. (Eds.), *book review* by L. C. Pakiser, 602
- Nault, L. R. See Bowers, W. S., et al.
- Navia, M. A. See Schevitz, R. W., et al.
- NEEDHAM, D. M., Machina carnis, *book review* of, 877
- Nei, M., and A. K. Roychoudhury: Gene differences between Caucasian, Negro, and Japanese populations, 434
- Neisseria gonorrhoeae: experimental infection of laboratory animals, R. J. Arko, 1200
- Nelson, P. G., and J. H. Peacock: Acetylcholine responses in L cells, 1005
- Nesbitt, M. N., and R. P. Donahue: Chromosome banding in patterns in preimplantation mouse embryos, 805
- Neural attenuation of responses to emitted sounds in echolocating bats, N. Suga and P. Schlegel, 82
- Neural basis of vision (*meeting report*), P. Gouras and P. O. Bishop, 188
- Neural quantum in sensory discrimination, A. S. S. Stevens, 749
- Neuroanatomical correlates of morphine dependence, E. Wei et al., 616
- Neuroblastoma: synchronization of neurite outgrowth in cultures grown on collagen, C. A. Miller and E. M. Levine, 799
- Neuron structure of the brain, G. I. POLIAKOV, *book review* by P. D. MacLean, 691
- New, long-lasting competitive inhibitor of angiotensin, A. R. Türker et al., 1203
- New physics report, The (*editorial*), P. H. Abelson, 479
- Newborn walking (*letters*), R. S. Illingworth et al., 1057
- Newell, N. D. See Pojeta, J., et al.
- Newman, E.: Contraction in *Stentor coeruleus*: a cinematic analysis, 447
- News and Comment: acupuncture, 592; Agnes imperilis Chesapeake bivalves, 149; aldrin and dieldrin follow DDT, 43; American Littoral Society, 682; Baker to leave NIH for Hazleton Labs., 155; bill boosting NSF moves to House, 975; blood banks to be regulated by FDA, 869; corn blight, 678; Council on Environmental Quality's third report, 593; Delaney anti-cancer clause, 414, 588, (*correction*, 779); diethylstilbestrol and a case study of regulatory abdication, 335; DuVal as "top doctor," 976; education research and Stanford Research contracts, 973; Ehrlich versus Commoner, 245; fall of Phillips Nuclear, 868; FDA general counsel Hutt, 498; FDA invents more tales about DES, 503; federal advisory meetings open to public, 412; fire storm project in Vietnam, 239; Fischer-Spassky charges, 778; Gell-Mann protested in Paris, 414; graduate medical education plan, 40; herbicide use in Vietnam and DOD study, 776; hexachlorophene, 1175; High Voltage Engineering Corporation, 151; Jackson Laboratory, 871; Kennedy plan to change research priorities approved, 42; Lear leaves Saturday Review, 334; Levich statement deplores campaign against him, 873; McGovern spells upheavals for scientists, 504; medical school admissions, 322; medicine at Michigan State, 1085; methadone distribution tightened, 502; minorities in the geosciences, 148; Nader on mental health centers, 413; NAS food committees, 1172; National Cancer Plan under review, 772, 1177; NIH and antiwar protest, 1176; NSF budget held down; Nixon vetoes HEW bill, 775; nuclear safety, 330, 771, 867, 970, 1080; October summit for science, 501; Pauling paper turned down by NAS, 409; Poland, United States, and Copernicus, 683; population committee launched, 1178; Proceedings of the National Academy of Sciences has a facelifting, 408; Ray nominated to AEC, 246; research councils in Britain lose some autonomy, 410; Russians reserve doubts as to whether Fort Detrick really tricked, 500; saccharin's future uncertain, 971; science committee posts filled, 590; science officials bow to military on weather modification, 411; science policy-making fellowships, 1084; secrecy and letters to CEQ, 38; Senate bans use of weather and fire as weapons, 499; shark tagging, 681; Solzhenitsyn on scientists, 972; Spain, 36, 153, 241; University of Michigan approves equal pay, 336; Willow Run Laboratories, 594, 677; winterizing Woods Hole, 1173; world ethics body proposed, 1174
- NICHOLS, B. W. See HITCHCOCK, C.
- Nichols, H.: *book review* of Times of feast, times of famine, 982
- Nicholson, W. J., et al.: Asbestos contamination of parenteral drugs, 171
- Nicolet, M.-A., et al.: Microanalysis of materials by backscattering spectrometry, 841
- Nicolson, G. L., and R. Yanagimachi: Terminal saccharides on sperm plasma membranes: identification by specific agglutinins, 276
- Nicotine blocks the suckling-induced rise in circulating prolactin in lactating rats, C. A. Blake and C. H. Sawyer, 619
- Nill, K. W. See Blum, F. A., et al.
- Nitrates, nitrites, and nitrosamines, I. A. Woolf and A. E. Wasserman, 15
- Nitrogen excretion in cockroaches: uric acid is not a major product, D. E. Mullins and D. G. Cochran, 699
- Nonsymbiotic origin of mitochondria, The, R. A. Raff and H. R. Mahler, 575
- Normal sleep in man, U. J. JOVANOVIĆ, *book review* by E. D. Weitzman, 159
- Novick, R.: Two-photon decay of metastable hydrogenic atoms, 367
- Nuclear waste storage (*letter*), C. Starr and R. P. Hammond, 744
- Nucleated assembly of microtubules in porcine brain extracts, G. G. Borisy and J. B. Olmsted, 1196
- Nucleotide conformations, S. Arnott et al., 451
- O
- Oberlander, H., and C. Tomblin: Cuticle deposition in imaginal disks: effects of juvenile hormone and fat body in vitro, 441
- Oceans, The: growth and oxygen isotope evolution, C. G. Chase and E. C. Perry, Jr., 992
- Ockner, R. K., et al.: A binding protein for fatty acids in cytosol of intestinal mucosa, liver, myocardium, and other tissues, 56
- Okereke, T., et al.: Systemic absorption of intrauterine copper, 358
- Oligothymidylates: formation by thermal



- condensation of O<sup>2</sup>,5'-cyclothymidine 3'-phosphate, J. Nagyvary and K. L. Nagpal, 272
- Olmsted, J. B. See Borisy, G. G.
- Olsen, S. R. See Hauck, R. D., et al.
- Olympiad of science, H. Goldsmith, 35
- Omenn, G. S., and H. O. McDevitt: Immunology and genetics (*meeting report*), 904
- On Carpenter and Smith, E. J. Carpenter et al., 85
- On growing old in America (*editorial*), W. Bevan, 839
- One part per million (*letter*), W. W. Porter, II, 477
- Open channels in sea ice (leads) as ion sources, W. D. Scott and Z. Levin, 425
- Oppenheim, J. J. See Horton, J. E., et al.
- Orbiting astronomical observatory: review of scientific results, A. D. Code and B. D. Savage, 213
- Ordóñez, L. A. See Weiss, B. F., et al.
- Ore petrology, R. L. STANTON, *book review* by E. E. Wahlstrom, 689
- Organic chemists and odors (*letters*), R. Schafer and K. R. Bower, 388
- Organic gardening (*letter*), J. H. Hildebrand, 944
- Origin of life by natural causes, The, M. G. RUTTEN, *book review* by S. L. Miller, 602
- Orleans, L. A.: How the Chinese scientist survives, 864
- Orlic, D. See Lev, R.
- OSMOND, C. B. See HATCH, M. D., et al.
- Osswald, G. See Adler, I., et al.
- Otte, D.: *book review* of Proceedings of the international study conference on the current and future problems of acridology, 984
- OWEN, W., The accessible city, *book review* of, 783
- P**
- Page, T. See Carruthers, G. R.
- Paigen, K. See Meisler, M.
- Pain inhibition (*letter*), S. E. Trent, 294
- Pakiser, L. C.: *book review* of The nature of the solid earth, 602
- Paleogeography and geological history of Greater Antilles, K. M. KHUOLEY and A. A. MEYERHOFF, *book review* by F. Nagle, 782
- Palmer, L. See Bertilsson, L.
- Paradoxes of science administration, T. A. Cowan, 964
- Parker, C. W. See Bloom, F. E., et al.
- Parker, R. L.: *book review* of Rabies, 984
- Parks, W. D. See Scolnick, E. M., et al.
- Pars, H. G. See Zitko, B. A., et al.
- Parsons, D. F. See Matricardi, V. R., et al.
- Particulate bioluminescence in dinoflagellates: dissociation and partial reconstitution, C. W. Fuller et al., 884
- Patel, C. K. N. See Kreuzer, L. B., et al.
- Patterson, C. C. See Dickson, E. M., et al.
- Paul, D. D., and S. Sutton: Evoked potential correlates of response criterion in auditory signal detection, 362
- Pauling, L.: Vitamin C (*letter*), 1152
- Pauly, J. E. See Haus, E., et al.
- PCB's in sand crabs (*letters*), T. O. Munson and R. Burnett, 652
- PCB's in the environment (*letter*), C. Adler et al., 118
- Peacock, J. H. See Nelson, P. G.
- Peng, T.-H. See Schindler, D. W., et al.
- Penrose conference on fracture mechanics and earthquake source mechanisms (*meeting report*), P. F. Dudley and R. E. Riecker, 87
- Perceiving real-world scenes, I. Biederman, 77
- Perez-Reyes, M., et al.: Intravenous injection in man of Δ<sup>9</sup>-tetrahydrocannabinol and 11-OH-Δ<sup>9</sup>-tetrahydrocannabinol, 633
- Peripheral motion detection and refractive error, H. W. Leibowitz et al., 1207
- Perry, E. C., Jr. See Chase, C. G.
- Perry, N. W., Jr., et al.: Chromatic specificity of the visual evoked response, 813
- Perspectives in quantum theory, W. YOURGRAU and A. VAN DER MERWE (Eds.), *book review* by J. S. Bell, 880
- Peters, J. A. See Collette, B. B., et al.
- Peterson, A. M. See Tyler, G. L., et al.
- Peterson, G. B., et al.: Conditioned approach and contact behavior toward signals for food or brain-stimulation reinforcement, 1009
- Petrified peat from a Paleocene lignite in North Dakota, F. T. C. Ting, 165
- Petroleum hydrocarbons: uptake and discharge by the marine mussel *Mytilus edulis*, R. F. Lee et al., 344
- Pfingst, B. See Miller, J. M., et al.
- pH Concept, The (*letter*), P. Seeman, 835
- Phillips, O. M.: *book review* of Atmosphere-ocean interaction, 982
- Photochemistry and spectroscopy, J. P. SIMONS, *book review* by G. S. Hammond, 1097
- Photoreception in a barnacle: electrophysiology of the shadow reflex pathway in *Balanus cariosus*, R. Millecchia and G. F. Gwilliam, 438
- Photosynthesis and photorespiration, M. D. HATCH et al. (Eds.), *book review* by G. E. Hoch, 690
- Photosynthesis, photorespiration, and plant productivity, I. ZELITCH, *book review* by G. E. Hoch, 690
- Physiology and biochemistry of the domestic fowl, D. J. BELL and B. M. FREEMAN (Eds.), *book review* by A. M. Lucas, 690
- Phytotoxins in plant diseases, R. K. S. WOOD et al. (Eds.), *book review* by H. Wheeler, 1097
- Pielou, E. C.: *book review* of Mathematical models in ecology, 981
- Pilar, G., and L. Landmesser: Axotomy mimicked by localized colchicine application, 1116
- Pilgrim, H. I., and G. S. Duboff: Cancer politics (*letters*), 836
- Pinthus, M. J., et al.: Field and vegetable crop mutants with increased resistance to herbicides, 715
- Pitelka, F. A. See Greenstone, M. H., et al.
- Pitting function of the spleen in malaria: ultrastructural observations, B. Schnitzer et al., 175
- Plant lipid biochemistry, C. HITCHCOCK and B. W. NICHOLS, *book review* by J. B. Mudd, 511
- Plant speciation, V. GRANT, *book review* by J. Heslop-Harrison, 600
- Plant tumor research, A. C. BRAUN (Ed.), *book review* by T. Stonier, 784
- Platt, J. See Celarius, R. A.
- Plaut, L. See Lewontin, R. C., et al.
- Plutonium plant safety (*letters*), D. E. Michels et al., 208
- Point of view: Solzhnitsyn on scientists, 972
- Pojeta, J., Jr., et al.: Rostroconchia: a new class of bivalved mollusks, 264; *erratum*, 779
- POLIÁKOV, G. I., Neuron structure of the brain, *book review* of, 691
- Policy analysis and the health care system, W. B. Schwartz, 967
- Policy on TV violence (*letter*), S. A. Shah, 9
- Politics of projection, The: a critique of Cartter's analysis, T. R. Vaughan and G. Sjöberg, 142
- Polychlorinated biphenyl residues: accumulation in Cayuga Lake trout with age, C. A. Bache et al., 1191
- POMEROY, W. B., Dr. Kinsey and the Institute for Sex Research, *book review* of, 416
- Poppenhausen, R. B. See Ockner, R. K., et al.
- Porter, L. K. See Hauck, R. D., et al.
- Porter, W. W., II.: One part per million (*letter*), 477
- Posner, L. A. See Rao, G. J. S., et al.
- Powers, D. A.: Hemoglobin adaptation for fast and slow water habitats in sympatric catostomid fishes, 360
- PREECE, T. F., and C. H. DICKINSON (Eds.), Ecology of leaf surface microorganisms, *book review* of, 785
- President's intern program (*letter*), H. M. Agnew, 1057
- Price, P. J., et al.: Type C RNA tumor viruses as determinants of chemical carcinogenesis: effects of sequence of treatment, 1003
- Primack, J. See von Hippel, F.
- Primate evolution, E. L. SIMONS, *book review* by R. Tuttle, 601
- Primate malarial, The, G. R. COATNEY et al., *book review* by P. C. C. Garnham, 50
- Proceedings of the international study conference on the current and future problems of acridology, C. F. HEMMING and T. H. C. TAYLOR (Eds.), *book review* by D. Otte, 984
- Progress in luminescence dosimetry (*meeting report*), K. Becker, 539
- Protein absorption by the intestine of the fetal rat in utero, R. Lev and D. Orlic, 522
- Prothero, J. See Meier, R. L., et al.
- Public archeology, C. R. MC GIMSEY, III, *book review* by C. H. Chapman, 1097
- Public interest science, F. von Hippel and J. Primack, 1166
- Purposive explanation in psychology, M. A. BODEN, *book review* by W. P. Alston, 251
- Pumps or no pumps, C. F. Hazlewood, 815
- R**
- Rabies, Y. NAGANO and F. M. DAVENPORT (Eds.), *book review* by R. L. Parker, 984
- Raff, R. A., and H. R. Mahler: The nonsymbiotic origin of mitochondria, 575
- Raisz, L. G. See Horton, J. E., et al.
- RALPH, E. K. See MICHAEL, H. N.
- Raman spectra of molecules and crystals, M. M. SUSCHINSKII, *book review* by L. S. Wall, 879
- Rao, G. J. S., et al.: Deficiency of kallikrein activity in plasma of patients with cystic fibrosis, 610
- Rapid immunological induction of murine lymphomas: evidence for a viral etiology, E. A. Cornelius, 524
- Rapid light-induced decrease in pineal serotonin N-acetyltransferase activity, D. C. Klein and J. L. Weller, 532
- Rare-earth oxides of manganese and cobalt rival platinum for the treatment of carbon monoxide in auto exhaust, R. J. H. Voorhoeve et al., 353
- Rat fighting behavior: serum dopamine-β-hydroxylase and hypothalamic tyrosine hydroxylase, F. Lamprecht et al., 1214
- Raup, D. M.: Taxonomic diversity during the Phanerozoic, 1065
- Ravin, L. J. See Mufson, D., et al.
- Rawlins, S. L. See Hoffman, G. J.
- Raynauld, J.-P.: Goldfish retina: sign of the rod input in opponent color ganglion cells, 84
- Raynor, S. See Dallos, P., et al.
- Razdan, R. K. See Zitko, B. A. et al.
- Reason and national goals, T. Nagel, 766

- Recent solar research, R. Howard, 1157  
 Receptors for histamine can be detected on the surface of selected leukocytes, K. L. Melmon *et al.*, 707  
 Reflection spectra of lunar dust grains with amorphous coatings, B. Hapke, 535  
 Rein, R. *See* Dostrovsky, I., *et al.*  
 Relation between REM sleep and intracranial self-stimulation, S. S. Steiner and S. J. Ellman, 1122  
 Remeika, J. P. *See* Voorhoeve, R. J. H., *et al.*  
 Remington, J. S. *See* Hibbs, J. B., Jr., *et al.*  
 Report on airborne lead (letters), P. B. Hammond *et al.*, 10  
 Research and planning (editorial), D. Stetten, Jr., 565  
*Research News*: air pollution instrumentation, 685, 1090; astronomy has a new golden age, 247; cancer virus theories, 44; carbon monoxide's natural sources dwarf man's output, 338; energy, 875, 978 (geothermal), 1088 (solar); gravity waves, 506; laser fusion, 1180; narcotic antagonists and the accelerated search, 249; *Physics in Perspective*, 597; prostaglandins, 780; x-rays from heavy ions, 156  
 Residuals charges for pollution control: a policy evaluation, A. M. Freeman III and R. H. Haveman, 322  
 Response of graduate enrollment to placement opportunities, The, L. E. Moses, 494  
 Responses of plants to environmental stresses, J. LEVITT, book review by I. F. Wardlaw, 786  
 Retina: ultrastructural alterations produced by extremely low levels of coherent radiation, D. O. Adams *et al.*, 58  
 Retreat (letter), E. O. Grigas, 746  
 Retrieval failure induced by electroconvulsive shock: reversal with dissimilar training and recovery agents, A. D. Springer and R. R. Miller, 628  
 Reversed transcriptase of primate viruses as immunological markers, E. M. Scolnick *et al.*, 1117  
 Reynolds, R. C. *See* Johnson, N. M., *et al.*  
 Richardson, S. D.: book review of *Trees*, 158  
 Richter, G. W. *See* Choie, D. D.  
 Riecker, R. E. *See* P. P. Dudley  
 Rifkind, R. A. *See* Harrison, D. E., *et al.*  
 Riley, G. A.: book review of *Fertility of the sea*, 252  
 Rinaldi, R. A. *See* Jahn, T. L., *et al.*  
 Rinehart, J. S.: 18.6-year earth tide regulates geyser activity, 346  
 Ripley, S. D., *et al.*: Information services (letters), 473  
 RNA metabolism in tracheal epithelium: alteration in hamsters deficient in vitamin A, D. G. Kaufman *et al.*, 1105  
 Robert, M. S. *See* Abrell, J. W., *et al.*  
 Robertson, D. R.: Social control of sex reversal in a coral-reef fish, 1007  
 ROBERTSON, E. C., *et al.* (Eds.), *The nature of the solid earth*, book review of, 602  
 Robertson, P. B., *et al.*: Collagenase: localization in polymorphonuclear leukocyte granules in the rabbit, 64  
 Robins, R. K. *See* Sidwell, R. W., *et al.*  
 Rodin, B. *See* Rodin, M.  
 Rodin, M., and B. Rodin: Student evaluations of teachers, 1164  
 Roelofs, R. I., *et al.*: Histochemical phosphorylase activity in regenerating muscle fibers from myophosphorylase-deficient patients, 795  
 Roisen, F. J., *et al.*: Dibutyl cyclic adenosine monophosphate stimulation of colcemid-inhibited axonal elongation, 809  
 Rose, H. A., and S. P. R. Rose: Chemical spraying as reported by refugees from South Vietnam, 710  
 Rose, S. P. R. *See* Rose, H. A.  
 Rosen, J. *See* Frank, B., *et al.*  
 Rosen, R.: book review of *Trends in general systems theory*, 508  
 Rosenbloom, R. S.: book review of *Suburban land conversion in the United States*, 419  
 Rosenfeld, A. *See* Barlow, H. B., *et al.*  
 Rosenzweig, M. L. *See* Gilpin, M. E.  
 Rosa, J. J. *See* Schevitz, R. W., *et al.*  
 Rosl, R. *See* Bouška, V.  
 Rostroconchia: a new class of bivalved mollusks, J. Pojeta, Jr., *et al.*, 264; erratum, 779  
 Roth, W. C. *See* Friedmann, E. I., *et al.*  
 Routtenberg, A.: book review of *Vertebrate memory*, 604  
 Rowe, H. M. *See* Lemberger, L., *et al.*  
 Roy, R.: Graduate education (letter), 1060  
 Roychoudhury, A. K. *See* Nei, M.  
 Rubin, J. *See* Arnott, S., *et al.*  
 Runnegar, B. *See* Pojeta, J., Jr., *et al.*  
 Russell, E. S. *See* Harrison, D. E., *et al.*  
 Russell, P. F., and S. S. Epstein: DDT toxicology (letters), 387  
 Ruth, J. M. *See* McDonough, L. M., *et al.*  
 RUTTEN, M. G., *The origin of life by natural causes*, book review of, 602  
 Ruttnerberg, M. A.: Human insulin: facile synthesis by modification of porcine insulin, 623  
 Ryan, A. *See* Miller, J. M., *et al.*  
 Ryan, W. L., and M. A. Durick: Adenosine 3',5'-monophosphate and N<sup>2</sup>-2'-O dibutyl-adenosine 3',5'-monophosphate transport in cells, 1002  
 Ryel, R. B. *See* Robertson, P. B., *et al.*
- S**
- Saffiotti, U. *See* Kaufman, D. G., *et al.*  
 Sagan, C., and G. Mullen: Earth and Mars: evolution of atmospheres and surface temperatures, 52  
 Sagan, L. A.: Human cost of nuclear power, 487  
 SAGER, R., *Cytoplasmic genes and organelles*, book review of, 510  
 Samson, H. H. *See* Falk, J. L., *et al.*  
 Samuels, A. I. *See* Miller, E. D., Jr., *et al.*  
 Sander, G. *See* Holmes, D. S., *et al.*  
 Sandstead, H. H. *See* Terhune, M. W.  
 Santos, N. N. *See* Bryant, R. C., *et al.*  
 Sassini, J. F., *et al.*: Human prolactin: 24-hour pattern with increased release during sleep, 1205  
 Satellite radiation measurements and clear air turbulence probability, J. A. Woods, 1100  
 Sauerheber, R. *See* Lee, R. F., *et al.*  
 Savage, B. D. *See* Code, A. D.  
 Sawyer, C. H. *See* Blake, C. A.  
 Scanlon, W. J.: book review of *Water and aqueous solutions*, 784  
 Schafer, R., and K. R. Bower, *Organic chemists and odors* (letter), 388  
 Scheinberg, I. H. *See* Okereke, T., *et al.*  
 Scheraga, H. E. *See* Dostrovsky, I., *et al.*  
 Scheving, L. E. *See* Haus, E., *et al.*  
 Schevitz, R. W., *et al.*: An isomorphous heavy atom derivative of crystalline formylmethionine transfer RNA, 429  
 Schiff, J., and W. R. Loewenstein: Development of a receptor on a foreign nerve fiber in a Pacinian corpuscle, 712  
 Schimke, R. T.: book review of *Hormones in development*, 785  
 Schimmerling, W. *See* Isaila, M. V., *et al.*  
 Schindler, D. W., *et al.*: Atmospheric carbon dioxide: its role in maintaining phytoplankton standing crops, 1192  
 SCHINDLER, K. (Ed.), *Cosmic plasma physics*, book review of, 1098  
 Schlegel, P. *See* Suga, N.  
 Schlessinger, D. *See* Kobayashi, G. S., *et al.*  
 Schmadebeck, R. *See* Adler, I., *et al.*  
 Schmidt-Nielsen, K., *Locomotion: energy cost of swimming, flying, and running*, 222  
 SCHMIDT-NIELSEN, K., *How animals work*, book review of, 1138  
 Schneider, I.: book review of *Invertebrate tissue culture*, 252  
 Schneider, L. M.: book review of *The accessible city*, 783  
 Schnitzer, B., *et al.*: Pitting function of the spleen in malaria: ultrastructural observations, 175  
 Schornstein, K. L. *See* Kazama, F. Y.  
 Schumacher, G. F. B. *See* Zanveld, L. J. D., *et al.*  
 Schwartz, W. B.: Policy analysis and the health care system, 967  
 Science and trans-science (editorial), A. M. Weinberg, 211  
 Scientific data: public or private? (letter), T. D. Sterling, 651  
 Scolnick, E. M., *et al.*: Reverse transcriptase of primate viruses as immunological markers, 1117  
 Scott, W. D., and Z. Levin: Open channels in sea ice (leads) as ion sources, 425  
 Sea level at southern California: a decadal fluctuation, J. Namias and J. C. K. Huang, 351  
 Seaborg, G. T.: Mexican President Echeverría and science (editorial), 1063  
 Second-order scattering from the sea: ten-meter radar observations of the Doppler continuum, G. L. Tyler *et al.*, 349  
 Secrist, J. A., III, *et al.*: Fluorescent modification of adenosine 3', 5'-monophosphate: spectroscopic properties and activity in enzyme systems, 279  
 Seeman, N. C., *et al.*: Solution of UpA structure (letter), 294  
 Seeman, P.: The pH concept (letter), 835  
 Sela, M. *See* Melmon, K. L., *et al.*  
 Seliger, H. H. *See* Fuller, C. W., *et al.*  
 Selikoff, I. J. *See* Nicholson, W. J., *et al.*  
 Selverston, A. *See* Mulloney, B.  
 Separation of skin reactive intestinal cancer antigen from the carcinoembryonic of Gold, A. C. Hollinshead *et al.*, 887  
 Serum, J. W. *See* Bache, C. A., *et al.*  
 Sex pheromone of the codling moth: structure and synthesis, L. M. McDonough *et al.*, 177  
 Sex role learning in childhood and adolescence (AAAS), 1127  
 Sex steroids, The, K. W. MCKERNS (Ed.), book review by E. Spaziani, 158  
 Shah, S. A.: Policy on TV violence (letter), 9  
 Shapley, D. (News and Comment): bill boosting NSF moves to House, 975; education research and Stanford Research contracts, 973; fire storm project in Vietnam, 239; Gell-Mann protested in Paris, 414; herbicide use in Vietnam and Department of Defense study, 776; Kennedy plan to change research priorities approved, 42; Lear leaves *Saturday Review*, 334; Levich statement deplores campaign against him, 873; McGovern plans spell upheavals for scientists, 504; Poland, United States, and Copernicus fete, 683; science committee posts filled, 590; science officials bow to military on weather modification, 411; Senate bans use of weather and fire as weapons, 499; University of Michigan approves equal pay, 336  
 Sharon, H., and H. Lis: Lectins: cell-agglutinating and sugar-specific proteins, 949  
 Shchori, Y. *See* Pinthus, M. J., *et al.*  
 Shearer, G. B. *See* Hauck, R. D., *et al.*  
 Sheehan, J. C. *See* Zitko, B. A., *et al.*  
 Shiotsuka, R. N. *See* Haus, E., *et al.*  
 Shirane, G.: book review of *Theory of thermal neutron scattering*, 50  
 Shiskin, J.: Federal statistics (letter), 474



- Shleser, R. See Hughes, J. T., et al.  
Shoaf, M. See Baranger, E., et al.  
Shortchanging the disadvantaged student (editorial), A. B. Grobman, 297  
Shubik, P. See Mirvish, S. S., et al.  
Shyu, K. W. See Robertson, P. B., et al.  
Sidwell, R. W., et al.: Broad-spectrum antiviral activity of virazole: 1- $\beta$ -D-ribofuranosyl-1, 2, 4-triazole-3-carboxamide, 705  
Siegel, R. T. See Morkovin, M. V.  
Siggins, G. R. See Bloom, F. E., et al.  
Sigler, P. B. See Schevitz, R. W., et al.  
Silver-foil psychrometer for measuring leaf water potential in situ, G. J. Hoffman and S. L. Rawlins, 802  
Simmons, H. A. See Horton, J. E., et al.  
Simms, D. L. See White, C. W., et al.  
SIMONS, B. L.: Primate evolution, book review of, 601  
SIMONS, J. P.: Photochemistry and spectroscopy, book review of, 1097  
Singer, L. See Messer, H. H., et al.  
Single cell activity in the auditory cortex of rhesus monkeys: behavioral dependency, J. M. Miller et al., 449  
Sipe, J. P., III. See Horrocks, W. DeW., Jr.  
Sjoberg, G. See Vaughan, T. R.  
Skelton, J.: Textile materials: recovery from imposed deformation, 657  
SLATER, T. F.: Free radical mechanisms in tissue injury, book review of, 1184  
SLATYER, R. O. See HATCH, M. D., et al.  
Smith, J. M. See Kaufman, D. G., et al.  
Smith, K. L., Jr. See Carpenter, E. J., et al.  
Smith, P. E. L. See Churcher, C. S.  
Smith, R. G. See Abrell, J. W., et al.  
Smith, S. V. See Knutson, D. W., et al.  
Smoler, D. See Hanafusa, H., et al.  
Smuckler, E. A.: book review of Free radical mechanisms in tissue injury, 1184  
Social control of sex reversal in a coral-reef fish, D. R. Robertson, 1007  
Social institutions and nuclear energy, A. M. Weinberg, 27  
Sodeman, T. See Schnitzer, B., et al.  
SOLMS, U. See ISLER, O., et al.  
Solution of UpA structure (letter), N. C. Seeman et al., 294  
Sothorn, R. B. See Haus, E., et al.  
Spangler, R. A. See Dostrovsky, I., et al.  
Sparber, S. B. See Spyker, J. M., et al.  
Spaziani, E.: book review of The sex steroids, 158  
Species of *Drosophila*, Th. Dobzhansky, 664  
Spectroscopic studies of molecular structure, G. Herzberg, 123  
Spicer, W. M.: Unspoken conspiracy? (letter), 746  
Spiegelman, S. See Hanafusa, H., et al.  
SPINAR, Z. V.: Tertiary frogs from central Europe, book review of, 603  
Spongy mesophyll remains in fossil leaf compressions, A. Chandrasekharan, 354  
Spore research-1971, A. N. BARKER et al. (Eds.), book review by R. S. Hanson, 1096  
Sporn, M. B. See Kaufman, D. G., et al.  
Springer, A. D., and R. R. Miller: Retrieval failure induced by electroconvulsive shock: reversal with dissimilar training and recovery agents, 628  
Spyker, J. M., et al.: Subtle consequences of methylmercury exposure: behavioral deviations in offspring of treated mothers, 621  
Srivastava, A. K., and A. H. Meier: Daily variation in concentration of cortisol in plasma in intact and hypophysectomized Gulf killifish, 185  
Staats, E. B. See Ripley, S. D., et al.  
Stability in zoological nomenclature, B. B. Collette et al., 452  
Stability of the martian atmosphere, M. B. McElroy and T. M. Donahue, 986  
Stahmann, M. A.: book review of Ecology of leaf surface micro-organisms, 785  
STANTON, R. L.: Ore petrology, book review of, 689  
Starr, C., and R. P. Hammond: Nuclear waste storage (letter), 744  
Statement on termination of pregnancy (letter), W. W. Doane et al., 477  
Stein, D. G. See Frank, B., et al.  
Stein, L. See Wise, C. D., et al.  
Steiner, A. L. See Bloom, F. E., et al.  
Steiner, S. S. and S. J. Ellman: Relation between REM sleep and intracranial self-stimulation, 1122  
Stelson, P.: book review of Hyperfine interactions in excited nuclei, 985  
Sterling, T. D.: Scientific data: public or private? (letter), 651  
Sternlieb, I. See Okereke, T., et al.  
Steroid protein interactions, U. WESTPHAL, book review by D. R. Idler, 509  
Stetten, D., Jr.: Research and planning (editorial), 565  
Stevens, S. S.: A neural quantum in sensory discrimination, 749  
Stewart, C. A., Jr., et al.: Atmospheric circulation of DDT, 724  
Stockholm conference (letters), E. A. Mauss and G. G. Berg, 746  
Stonier, T.: book review of Plant tumor research, 784  
Straus, F. H.: Virtuous noun verbed (letter), 1154  
Stress of hot environments, The, D. MCK. KERSLAKE, book review by W. van Beaumont, 1096  
Stricker, E. M. See Zigmond, M. J.  
Structure and function of chloroplasts, M. GIBBS (Ed.), book review by H. Lyman, 510  
Student evaluations of teachers, M. Rodin and B. Rodin, 1164  
Student-teacher interaction (letter), C. E. Wulfman, 386  
Studies on the mechanism of hormone action, E. W. Sutherland, 401  
Subcellular organization and function in endocrine tissues, H. HELLER and K. LEDERIS (Eds.), book review by A. Berlind, 49  
Subtle consequences of methylmercury exposure: behavioral deviations in offspring of treated mothers, J. M. Spyker et al., 621  
Suburban land conversion in the United States, M. CLAWSON, book review by R. S. Rosenbloom, 419  
Suffering legions? (letter), D. A. Goodman, 210  
Suga, N., and P. Schlegel: Neural attenuation of responses to emitted sounds in echolocating bats, 82  
Suk, W. A. See Price, P. J., et al.  
Sullivan, J. J. See Hughes, J. T., et al.  
Sullivan, K. A. See Berke, G., et al.  
Sundaraingam, M. See Arnott, S., et al.  
Superior colliculus of the tree shrew: a structural and functional subdivision into superficial and deep layers, V. A. Casagrande et al., 444  
Surface composition determined by analysis of impact radiation, C. W. White et al., 481  
SUSCHINSKII, M. M.: Raman spectra of molecules and crystals, book review of, 879  
Sussman, J. L. See Seeman, N. C., et al.  
Sutherland, E. W.: Studies on the mechanism of hormone action, 401  
Sutton, D. See Miller, J. M., et al.  
Sutton, S. See Paul, D. D.  
Sweet, C. S. See Türker, R. K., et al.  
Switchboard versus statistical theories of learning and memory, E. R. John, 850  
Synthetic scotophobin in goldfish: specificity and effect on learning, R. C. Bryant et al., 635  
Systemic absorption of intrauterine copper, T. Okereke et al., 358  
Tanner, J. T., et al.: Mercury content of common foods determined by neutron activation analysis, 1102  
TAUTU, P. See HODSON, F. R., et al.  
Taxonomic diversity during the Phanerozoic, D. M. Raup, 1065  
Taylor, C. R. See Blatt, C. M., et al.  
Taylor, R. E. (University of Alabama). See Robertson, P. B., et al.  
Taylor, R. E. (University of California, Riverside): book review of Dating techniques for the archaeologists, 419  
TAYLOR, T. H. C. See HEMMING, C. F.  
Teague, C. C. See Tyler, G. L., et al.  
Technology assessment (letter), J. Frey, 116  
Telecommunications with muon beams, R. C. Arnold, 163  
Temperature and water relations of reptiles, The, J. L. C. CLOUDSLEY-THOMPSON, book review by C. Gans, 420  
Teng, T.-C. See Adler, C., et al.  
Terhune, M. W., and H. H. Sandstead: Decreased RNA polymerase activity in mammalian zinc deficiency, 68  
Terminal saccharides on sperm plasma membranes: identification by specific agglutinins, G. L. Nicolson and R. Yanagimachi, 276  
Tertiary frogs from central Europe, Z. V. SPINAR, book review by R. Estes, 603  
Textile materials: recovery from imposed deformation, J. Skelton, 657  
Theory of thermal neutron scattering, W. MARSHALL and S. W. LOVESEY, book review by G. Shirane, 50  
Thermal panting in dogs: the lateral nasal gland, a source of water for evaporative cooling, C. M. Blatt et al., 804  
Thoa, N. B. See Lamprecht, F., et al.  
Thomas, G. H. See Cleaver, J. E., et al.  
Thompson, E. B. See Aviv, D.  
Thompson, R. D., et al.: Vampire bat control by systemic treatment of livestock with an anticoagulant, 896  
Thompson, W. R., et al.: Flavonols: pigments responsible for ultraviolet absorption in nectar guide of flower, 528  
Thun, R. E., and R. L. Garwin: Military spending (letters), 833  
Tidal power, T. J. GRAY and O. K. GASHUS (Eds.), book review by D. Harleman, 783  
Till, R. P. GOLDTHWAIT (Ed.), book review by J. H. Hartshorn, 879  
Times of feast, times of famine, E. L. LADURIE, book review by H. Nichols, 982  
Timmons, M. C. See Perez-Reyes, M., et al.  
Ting, F. T. C.: Petrified peat from a Paleocene lignite in North Dakota, 165  
Todaro, G. J. See Scolnick, E. M., et al.  
Tolcott, M. A., et al.: Biomedical engineering (letters), 562  
Tolk, N. H. See White, C. W., et al.  
Tomblin, C. See Oberlander, H.  
Toward a national technology policy, J. E. Goldman, 1078  
Traub, W. A. See Carleton, N. P.  
Trees, M. H. ZIMMERMAN and C. L. BROWN, book review by S. D. Richardson, 158  
Trends in general systems theory, G. J. KLIR (Ed.), book review by R. Rosen, 508  
Trent, S. E.: Pain inhibition (letter), 294  
Trombka, J. See Adler, I., et al.  
Tropical rain forest, The: a nonrenewable resource, A. Gómez-Pompa et al., 762  
Tumor immunity in vitro: destruction of a mouse ascites tumor through a cycling pathway, G. Berke et al., 433  
Tunable infrared laser spectroscopy of atmospheric water vapor, F. A. Blum et al., 694  
Turbidity trends at Tucson, Arizona, K. Heidel, 882  
Türker, R. K., et al.: A new, long-lasting competitive inhibitor of angiotensin, 1203



## W

- Turner, J. B. See Friedmann, E. I., *et al.*  
 Tuttle, R.: book review of Primate evolution, 601  
 TUTTLE, R. (Ed.), The functional and evolutionary biology of primates, book review of, 252  
 Two cooks for the same kitchen? (editorial), W. Bevan, 1155  
 Two photon decay of metastable hydrogenic atoms, R. Novick, 367  
 Tyler, G. L., *et al.*: Second-order scattering from the sea: ten-meter radar observations of the Doppler continuum, 349  
 Type C RNA tumor viruses as determinants of chemical carcinogenesis: effects of sequence of treatment, P. J. Price *et al.*, 1003  
 Tyson, J. E., *et al.*: Human lactational and ovarian response to endogenous prolactin release, 897

## U

- UFO experience, The, J. A. HYNK, book review by B. C. Murray, 688  
 Understanding of science (editorial), A. Etzioni, 391  
 Unspoken conspiracy? (letter), W. M. Spicer, 746  
 Use of variations in natural nitrogen isotope abundance for environmental studies: a questionable approach, R. D. Hauck *et al.*, 453  
 Uses of knowledge, The (letters), R. C. Lewontin *et al.*, 386  
 Uses of research (letters), M. V. Morkovin and R. T. Siegel, 652

## V

- VAGO, C. (Ed.), Invertebrate tissue culture, book review of, 252  
 Vaidyanathan, V. S. See Dostrovsky, I., *et al.*  
 Vampire bat control by systemic treatment of livestock with an anticoagulant, R. D. Thompson *et al.*, 806  
 VAN BEAUMONT, W.: book review of The stress of hot environments, 1096  
 VAN DER MERWE, A. See YOURGRAU, W.  
 Van Nostrand, R. C. See Meier, R. L., *et al.*  
 Variation in cardiac glycoside content of monarch butterflies from natural populations of eastern North America, L. P. Brower *et al.*, 426  
 Variation in tyrosine aminotransferase induction in HTC cell clones, D. Aviv and E. B. Thompson, 1201  
 Vaughan, T. See Wyatt, R. J., *et al.*  
 Vaughan, T. R., and G. Sjoberg: The politics of projection: a critique of Cartter's analysis, 142  
 Vázquez-Yanes, C. See Gómez-Pompa, A., *et al.*  
 Vedder, J. F. See Kerridge, J. F.  
 Vertebrate memory, I. S. BERITASHVILL, book review by A. Routtenberg, 604  
 Villar-Palasi, C. See Secrist, J. A., III, *et al.*  
 Virtuous noun verbed (letter), F. H. Straus, 1154  
 Visual pattern analysis in machines and animals, H. B. Barlow *et al.*, 567  
 Viswanathan, R., and A. C. Lawson: Heat capacity of superconducting ternary molybdenum sulfides, 267  
 Vitamin C (letter), L. Pauling, 1152  
 von Hippel, F., and J. Primack: Public interest science, 1166  
 Voorhoeve, R. J. H., *et al.*: Rare-earth oxides of manganese and cobalt rival platinum for the treatment of carbon monoxide in auto exhaust, 353  
 Vosburgh, K. G. See Isaila, M. V., *et al.*  
 Votta, J. J. See Jahn, T. L., *et al.*

- Wade, N. (News and Comment): aldrin and dieldrin follow DDT, 43; corn blight, 678; Delaney anti-cancer clause, 588 (correction, 779); diethylstilbestrol and a study of regulatory abdication, 335; FDA general counsel Hutt, 498; FDA invents more tales about DES, 503; Fischer-Spessky charges, 778; heroin, 1083; hexachlorophene, 1175; Russians reserve doubts as to whether Fort Detrick is really detricked, 500  
 Wahlstrom, E. E.: book review of Ore petrology, 689  
 Walker, W. A., *et al.*: Intestinal uptake of macromolecules: effect of oral immunization, 608  
 Wall, L. S.: book review of Raman spectra of molecules and crystals, 879  
 Wall, M. E. See Perez-Reyes, M., *et al.*  
 Wallcave, L. See Mirvish, S. S., *et al.*  
 Walsh, J. (News and Comment): medicine at Michigan State, 1085; NIH and anti-war protest, 1176; Spain, 36, 153, 241; Willow Run Laboratories, 594, 677  
 Wang, C.-Y. See Dallos, P., *et al.*  
 Waranus, F. B.: Lunar studies (letter), 652; erratum, 746  
 Wasserman, A. E. See Wolff, I. A.  
 Water and aqueous solutions, R. A. HORNE (Ed.), book review by W. J. Scanlon, 784  
 Water-soluble derivatives of  $\Delta^1$ -tetrahydrocannabinol, B. A. Zitko *et al.*, 442  
 Waters, T. D., *et al.*: Yellow fever vaccination, avian leukosis virus, and cancer risk in man, 76  
 Watson, K. F. See Hanafusa, H., *et al.*  
 Way, E. L. See Wei, E., *et al.*  
 Webb, R. E. See Bowers, W. S., *et al.*  
 Webster, T. P., *et al.*: Fission in the evolution of a lizard karyotype, 611  
 Wedner, H. J. See Bloom, F. E., *et al.*  
 Wei, E., *et al.*: Neuroanatomical correlates of morphine dependence, 616  
 Weigert, M. See Blomberg, B., *et al.*  
 Weinberg, A. M.: Science and trans-science (editorial), 211; Social institutions and nuclear energy, 27  
 Weinstein, J. See Melmon, K. L., *et al.*  
 Weis, J. S. See Doane, W. W., *et al.*  
 Weisenberg, R. C.: Microtubule formation in vitro in solutions containing low calcium concentrations, 1104  
 Weiser, M. M.: Concanavalin A agglutination of intestinal cells from the human fetus, 525  
 Weiss, B. F., *et al.*: Dopamine: mediator of brain polysome disaggregation after L-dopa, 613  
 Weiss, H. V. See Dickson, E. M., *et al.*  
 Weitzman, E. D.: book review of Normal sleep in man, 159. See also Sassin, J. F., *et al.*  
 Welch, B. L., and W. E. Westman: Ecologists (letters), 115  
 Weller, J. L. See Klein, D. C.  
 Westenberg, A. A.: Carbon monoxide and nitric oxide consumption in polluted air: the carbon monoxide-hydroperoxyl reaction, 255  
 Westman, W. E. See Welch, B. L.  
 Weston, J. A. See Doane, W. W., *et al.*  
 WESTPHAL, U.: Steroid protein interactions, book review of, 509  
 Wheeler, H.: book review of Phytotoxins in plant diseases, 1097  
 Where the action is (editorial), J. E. Mock, 747  
 White, C. W., *et al.*: Surface composition determined by analysis of impact radiation, 481  
 White, M. G. See Isaila, M. V., *et al.*  
 Whitlock, J. P., Jr., *et al.*: Aryl hydrocarbon (benzopyrene) hydroxylase is stimulated in human lymphocytes by mitogens and benz[a]anthracene, 618  
 Whitmire, C. E., and R. J. Huebner: In-

- hibition of chemical carcinogenesis by viral vaccines, 60  
 Wigner, E. P., and D. Lester, Cloud seeding (letters), 651  
 Wilkes, H. G.: Maize and its wild relatives, 1071  
 Williams, E. E. See Webster, T. P., *et al.*  
 Williams, R. B. See Lamprecht, F., *et al.*  
 Williams, R. C., and R. J. Gibbons: Inhibition of bacterial adherence by secretory immunoglobulin A: a mechanism of antigen disposal, 697  
 Williamson, K. L. See Brower, L. P., *et al.*  
 Winger, G. See Falk, J. L., *et al.*  
 Wise, C. D., *et al.*: Benzodiazepines: anxiety-reducing activity by reduction of serotonin turnover in the brain, 180  
 Witkowski, J. T. See Sidwell, R. W., *et al.*  
 Wittner, W. K., See Costell, R. M., *et al.*  
 WOLF, J. See BARKER, A. N., *et al.*  
 Wolff, I. A., and A. E. Wasserman: Nitrates, nitrites, and nitrosamines, 15  
 Wolfe, D. (editorial): Behind the President's message, 13  
 Women physicists (letter), E. Baranger *et al.*, 945  
 WOOD, R. K. S., *et al.* (Eds.), Phytotoxins in plant diseases, book review of, 1097  
 Woods, J. A.: Satellite radiation measurements and clear air turbulence probability, 1100  
 Woodward, W. R., and E. Herbert: Coding properties of reticulocyte lysine transfer RNA's in hemoglobin synthesis, 1197  
 Woodwell, G. M. See Stewart, C. A., Jr., *et al.*  
 World dynamics: a note: R. Boyd, 516  
 Wright, R. R. See Hammond, P. B., *et al.*  
 Wulfman, C. E.: Student teacher interaction (letter), 386  
 Wurster, C. F. See Adler, C., *et al.*  
 Wurtman, R. J. See Weiss, B. F., *et al.*  
 Wyatt, G. R.: book review of Biochemical aspects of insect development, 692  
 Wyatt, R. J., *et al.*: Behavioral changes of chronic schizophrenic patients given L-5-hydroxytryptophan, 1124

## Y

- Yamamoto, M. See Türker, R. K., *et al.*  
 Yanagimachi, R. See Nicolson, G. L.  
 Yaniv, A. See Hanafusa, H., *et al.*  
 Yellow fever vaccination, avian leukosis virus, and cancer risk in man, T. D. Waters *et al.*, 76  
 Yin, L. See Adler, I., *et al.*  
 YOUNG, J. Z.: The anatomy of the nervous system of *Octopus vulgaris*, book review of, 1183  
 Youngs, W. D. See Bache, C. A., *et al.*  
 YOURGRAU, W., and A. VAN DER MERWE (Eds.), Perspectives in quantum theory, book review of, 880

## Z

- Zelazo, N. A. See Illingworth, R. S., *et al.*  
 Zelazo, P. R. See Illingworth, R. S., *et al.*  
 Zaneveld, L. J. D., *et al.*: Acrosomal proteinase and proteinase inhibitor of human spermatozoa, 702  
 Zarembo, J. E. See Mufson, D. *et al.*  
 Zeh, R. See Jahn, T. L., *et al.*  
 ZELITCH, I.: Photosynthesis, photorespiration, and plant productivity, book review of, 690  
 Zigmond, M. J., and E. M. Stricker: Deficits in feeding behavior after intraventricular injection of 6-hydroxydopamine in rats, 1211  
 Zimmerberg, B. See Glick, S. D., *et al.*  
 ZIMMERMAN, M. H. and C. L. BROWN, Trees, book review of, 158  
 Zitko, B. A., *et al.*: Water soluble derivatives of  $\Delta^1$ -tetrahydrocannabinol, 442  
 Zwolinski, B. J. See Eicher, L. D.

---

---

# SCIENCE

Index to Volume 178  
October–December 1972

**Editorial Board**

ALFRED BROWN  
JAMES F. CROW  
H. S. GUTOWSKY  
ARTHUR D. HASLER  
RUDOLF KOMPFFNER  
DANIEL KOSHLAND, JR.  
THOMAS KUHN

GARDNER LINDZEY  
ELLIOTT W. MONTROLL  
FRANK PRESS  
FRANK W. PUTNAM  
WALTER O. ROBERTS  
RAYMOND H. THOMPSON  
EDWARD O. WILSON

**Editorial Staff**

WILLIAM BEVAN  
*Publisher*

HANS NUSSBAUM  
*Business Manager*

PHILIP H. ABELSON  
*Editor*

EARL J. SCHERAGO, *Advertising Director*

Published by the  
**American Association for the Advancement of Science**  
1515 Massachusetts Avenue, NW, Washington, D.C. 20005

Printed in Washington, D.C., by McCall Printing Company, Mid-Atlantic Division  
Copyright 1972 by the American Association for the Advancement of Science

---

---

Number	Date of Issue	Pages	Number	Date of Issue	Pages
4056	6 October	1-84	4062	17 November	673-800
4057	13 October	85-208	4063	24 November	801-924
4058	20 October	209-340	4064	1 December	925-1016
4059	27 October	341-440	4065	8 December	1017-1140
4060	3 November	441-532	4066	15 December	1141-1232
4061	10 November	533-672	4067	22 December	1233-1316

The names of authors of books reviewed are printed in SMALL CAPITALS.

## A

- AAAS annual meeting, 79, 186, 321, 425, 524, 651, 777, 884, 1008
- Abdel-Hameed, F.: Hemoglobin concentration in normal diploid and intersex triploid chickens: genetic inactivation or canalization?, 864
- Abelson, P. H. (editorials): Energy conservation, 355; Latin American aspirations, 13; Reliability of consumer goods, 937; Science, technology, and diplomacy, 701
- Acevedo, J. C. See Theodore, J., *et al.*
- ACLAND, H. See JENCKS, C., *et al.*
- Acquisition of key-pecking via autoshaping as a function of prior experience: "learned laziness"?, L. A. Engberg *et al.*, 1002
- Acrylamide polymerization: new method for determining the oxygen content in blood, J. Folkman *et al.*, 170
- Acupuncture (letter), A. Taub, 9
- Adams, J. B. See McCord, T. B.
- Adaptation of the adrenal medulla: sustained increase in choline acetyltransferase by psychosocial stimulation, A. M. Goldberg and B. L. Welch, 319
- Addison and the white corpuscles, L. J. RATHER, book review by T. S. Hall, 152
- Adenosine 3',5'-monophosphate: electrophysiological evidence for a role in synaptic transmission, D. A. McAfee and P. Greengard, 310
- Adenosine 3',5'-monophosphate: regional differences in chick embryos at the head process stage, M. Réporter and G. C. Rosenquist, 628
- Adequate protection (letter), M. Goldberg, 1151
- Adjusting to normal times (editorial), R. S. Morison, 1045
- Adler, C.: Falling watermelons (letter), 450
- Adler, N. T. See Komisaruk, B. R., *et al.*
- Adrenergic and cholinergic innervation of the hamster Harderian gland, J. E. Norvell and J. W. Clabough, 1102
- Aging and society, M. W. RILEY *et al.*, book review by G. L. Maddox, 294
- Aging: noncycling cells an explanation, S. Gelfant and J. G. Smith, Jr., 357
- Agren, H.: book review of Nongcun yisheng shouce (peasant village physician's handbook), 394
- Alfvén, H. See Sonnet, C. P., *et al.*
- Allam, A. I. See Pitts, G., *et al.*
- Alter, H. W. See Fleischer, R. L., *et al.*
- American physicians in the nineteenth century, W. G. ROTHSTEIN, book review by J. Duffy, 975
- Amino acid neurotransmitter candidates: sodium-dependent, high-affinity uptake by unique synaptosomal fractions, J. P. Bennett, Jr., *et al.*, 997
- Anderson, David L., and J. N. Palmieri: Research at Oberlin (letter), 811
- Anderson, Don L., and T. C. Hanks: Is the moon hot or cold?, 1245
- Anderson, J. D., *et al.*: Dichloromethane and lettuce seed germination, 1309
- Anderson, L. C. See Nordling, S., *et al.*
- Anderson, M. S. See Plotnikoff, N. P., *et al.*
- Anderson, S. J. See Carpenter, E. J., *et al.*
- Andrews, F. C.: Gravitational effects on concentrations and partial pressures in solutions: a thermodynamic analysis, 1199
- Andry, D. K., and M. W. Luttges: Memory traces: cycloheximide and electroconvulsive shock, 518
- Aneshansley, D. See Ghiradella, H., *et al.*
- Anker, P., and M. Stroun: Bacteria ribonucleic acid in the frog brain after a bacterial peritoneal infection, 621
- Annual review of biophysics and bioengineering, M. F. MORALES *et al.* (Eds.), book review by H. W. Sipton, 1083
- Antigens specific for human lymphocytic and myeloid leukemia cells: detection by nonhuman primate antisera, R. S. Metzgar *et al.*, 986
- ANTONINI, E., and M. BRUNORI, Hemoglobin and myoglobin in their reactions with ligands, book review of, 296
- Archeological perspective, An, L. R. BINFORD, book review by C.-A. Moberg, 741
- Arene oxides: biochemistry and metabolism (meeting report), S. Udenfriend and P. Bartl, 779
- Argyris, B. F.: book review of The cells and tissues of the immune system, 49
- Artandi, S.: Misrepresented by "women's lib" (editorial), 565
- Arthropod molting hormone: radioimmune assay, D. W. Borst and J. D. O'Connor, 418
- Artificial cloud formation in the atmosphere, K. O. L. F. Jayaweera and T. Ohtake, 504
- Aryl hydrocarbon hydroxylase induction in human leukocytes, D. L. Busbee *et al.*, 315

- Assessment of population affinities in man, The, J. S. WEINER and J. HUIZINGA (Eds.), book review by R. Singer, 1192
- Astrodynamics, S. HERRICK, book review by J. M. A. Danby, 153
- Astronomical applications of differential interferometry, C. C. Counselman, III, *et al.*, 607
- Astronomy and air pollution (meeting report), P. W. Hodge *et al.*, 1123
- Atherton, L. M. See Davisson, M. T., *et al.*
- Atlas of animal bones, E. SCHMID, book review by S. J. Olsen, 297
- Atluri, R. L. See Walsh, J. V., *et al.*
- Atwater, J. See Gill, F., *et al.*
- Aurbach, G. D. See Marx, S. J., *et al.*
- Australia antigen (hepatitis B antigen): a conformational antigen dependent on disulfide bonds, G. N. Vyas *et al.*, 1300
- Aviv, H., *et al.*: Translation of bacteriophage Q $\beta$  messenger RNA in a murine Krebs 2 ascites tumor cell-free system, 1293
- Axel, R. See Weinstein, I. B., *et al.*

## B

- Bacterial ribonucleic acid in the frog brain after a bacterial peritoneal infection, P. Anker and M. Stroun, 621
- Baker, R. W., *et al.*: Molecular structure of LSD, 614
- Ball, G. G.: Self-stimulation in the ventromedial hypothalamus, 72
- BANE, M. J. See JENCKS, C., *et al.*
- Banfield, W. G. See Farley, C. A., *et al.*
- Bárány, M.: book review of Muscle biology, 973
- Barber, R. T., *et al.*: Mercury concentrations in recent and ninety-year-old benthopelagic fish, 636
- Barker, J. L. See Levitan, H.
- Bartl, P. See Udenfriend, S.
- Bartoshuk, L. M., G. Kapatos, R. M. Gold: Rats drink less cool water: a change in the taste of water?, 1121
- Bartoshuk, L. M., C.-H. Lee, R. Scarpellino: Sweet taste of water induced by artichoke (*Cynara scolymus*), 988
- Bassett, C. A. L., and Pawluk, R. J.: Electrical behavior of cartilage during loading, 982
- Bastian, F. O., *et al.*: Herpesvirus hominis: isolation from human trigeminal ganglion, 306
- Battifora, H. A. See Mangkornkanok, M., *et al.*



- Bauld, J. See Walter, M. R., et al.
- Bears, S. HERRERO (Ed.), book review by R. D. Taber, 297
- Beck, S. D., and R. K. Bharadwaj: Reversed development and cellular aging in an insect, 1210
- Becker, E. See Reiner, A. M.
- Becker, E. D., and T. C. Farrar: Fourier transform spectroscopy, 361
- BEDINI, S. A., The life of Benjamin Banneker, book review of, 151
- BEERS, R. F., JR., et al. (Eds.), Molecular and cellular repair processes, book review of, 1086
- Beggiatoa: Occurrence in the rice rhizosphere, G. Pitts et al., 990
- Bekofske, K., and V. C. Liu: Internal gravity wave-atmospheric wind interaction: a cause of clear air turbulence, 1089
- Benedict, W. F. See Karon, M.
- Bennett, J. P., Jr., et al.: Amino acid neurotransmitter candidates: sodium-dependent high-affinity uptake by unique synaptosomal fractions, 997
- Bennett, L. H. See Weisman, I. D., et al.
- Berkowitz, B., and S. Spector: Evidence for active immunity to morphine in mice, 1290
- Berlin, R. D. See Yin, H. H., et al.
- Berman, R. S.: Science and values (editorial), 453
- Bernal, I., and S. F. Watkins: Direct phase determination from neutron diffraction data of the structure of melampodin, 1282
- Bernstein, I. S. See Rose, R. M., et al.
- Besten, L. D. See Stegnick, L. D.
- Between laws of thermodynamics and coding of information, W. Brostow, 123
- Beyer, R. T.: book review of The foundations of acoustics, 497
- Bharadwaj, R. K. See Beck, S. D.
- Bias, W. B., et al.: Cytotoxic antibody in normal human sera reactive with tumor cells from acute lymphocytic leukemia, 304
- Biehler, S. See Elders, W. A., et al.
- Biemann, K. See Hites, R. A.
- BINFORD, L. R., An archeological perspective, book review of, 741
- Biochemistry and pharmacology of free fatty acids, W. L. HOLMES and W. M. BORTZ (Eds.), book review by M. Fried, 1276
- Biochemistry of animal fossils, The, R. W. G. WYCKOFF, book review by T. J. M. Schopf, 1086
- Blair, C. M.: Federal project grants (letter), 1041
- Blatt, H.: book review of Sand and sandstone, 497
- BLISSETT, M., Politics in science, book review of, 495
- Blood-brain barrier: penetration of morphine, codeine, heroin, and methadone after carotid injection, W. H. Oldendorf et al., 984
- Blough, D. S.: book review of Inhibition and learning, 295
- Blum, R. H.: book review of Drugs and the public, 151
- BOAKES, R. A., and M. S. HALLIDAY (Eds.), Inhibition and learning, book review of, 295
- Boba, A. See Edsall, J. T.
- Bock, R. D.: book review of The dependability of behavioral measurements, 1275
- Bodis-Wollner, I.: Visual acuity and contrast sensitivity in patients with cerebral lesions, 769
- Böhlen, P. See Udenfriend, S., et al.
- Boime, I. See Aviv, H., et al.
- Bolker, E., and N. B. Schwartz: Nature's highways (letters), 934
- Bond, V. P. See McNulty, P. J., et al.
- Bone marrow-derived lymphoid cells (B cells): functional depletion with cobra factor and fresh serum, N. L. Levy et al., 866
- Bonow, R. See Tedesco, T. A., et al.
- Boorman, S. A. See Schoener, T. W.
- Borst, D. W., and J. D. O'Connor: Arthropod molting hormone: radioimmune assay, 418
- BORTZ, W. M. See HOLMES, W. L.
- Bourne, G. H.: Etymological purity (letter), 812
- Boyse, E. A. See Stockert, E., et al.
- Brace, W. F., et al.: Cracks and pores: a closer look, 162
- Brain serotonin content: physiological regulation by plasma neutral amino acids, J. D. Fernstrom and R. J. Wurtman, 414
- Brandt, T. See Dichgans, J., et al.
- Braun, L. See Oldendorf, W. H., et al.
- Brazil (letter), H. Grobman, 9
- Breath tests for determining alcohol in the blood, W. S. Lovell, 264
- Breeding cycle of the flea *Cediopsylla simplex* is controlled by breeding cycle of host, M. Rothschild and B. Ford, 625
- Breese, G. R. See Plotnikoff, N. P., et al.
- Bremner, T. See Rowe, W. P., et al.
- Brewer, R. G.: Nonlinear spectroscopy, 247
- Bricker, O. P.: book review of The encyclopedia of geochemistry and environmental sciences, 1277
- Bridgman, B.: Visual receptive fields sensitive to absolute and relative motion during tracking, 1106
- Brock, T. D. See Walter, M. R., et al.
- Brokaw, C. J.: Flagellar movement: a sliding filament model, 455
- Brostow, W.: Between laws of thermodynamics and coding of information, 123
- Brown, A. M. See Brown, H. M.
- Brown, H. M., and A. M. Brown: Ionic basis of the photoreponse of *Aplysia* giant neuron:  $K^+$  permeability increase, 755
- Brune, J. N. See Oldenburg, D. W.
- BRUNORI, M. See ANTONINI, E.
- Bryant, R. C., et al.: Nonspecific behavioral effects of substances from mammalian brain, 521
- Bryant, T. R.: Gas exchange in dry seeds: circadian rhythmicity in the absence of DNA replication, transcription, and translation, 634
- Buell, D. N. See Gavin, J. R., III, et al.
- BUNDY, M. See KEY, M. M., et al.
- Bunker, D.: book review of Unimolecular reactions, 973
- Burbank, R. D., et al.: Crystal structure of krypton difluoride at  $-80^\circ\text{C}$ , 1285
- Bureaucracy (letter), M. Chessin, 11
- Burk, D. See Weisman, I. D., et al.
- Burke, B. F. See Hinteregger, H. F., et al.
- Burns, P. J. See Bias, W. B., et al.
- Burns, J. J. See Conney, A. H.
- Busbee, D. L., et al.: Aryl hydrocarbon hydroxylase induction in human leukocytes, 315
- Buseck, P. R. See McNerney, J. J., et al.
- Calcitonin receptors of kidney and bone, S. J. Marx et al., 999
- Caldwell, S. L. See Taylor, C. R., et al.
- Callahan, D. See Johnson, L. J., et al.
- Calloway, N. O. See Dawes, R. M., et al.
- Calvin, M. See Thompson, F. M., et al.
- Cancer prevention (letter), M. A. Schneiderman and J. A. Peters, 697
- Cantrell, E. T. See Busbee, D. L., et al.
- Capital City Readout—AAAS communication experiment (AAAS), 526
- Carbon: a suggested new hexagonal crystal form, A. G. Whittaker and G. M. Wolten, 54
- Carlisle, E. M.: Silicon: an essential element for the chick, 619
- Carpenter, E. J.: Nitrogen fixation by a blue-green epiphyte on pelagic *Sargassum*, 1207
- Carpenter, E. J., et al.: Polystyrene spheres in coastal waters, 749
- Carrier-mediated ion transport, P. Läuger, 24
- Carson, H. L.: book review of Ecological genetics and evolution, 855
- CARSON, M. A., and M. J. KIRBY, Hillslope form and process, book review of, 1083
- CASSENS, R. G. (Ed.), Muscle biology, book review of, 973
- Cat hemoglobin: pH-dependent cooperativity of oxygen binding, M. N. Hamilton and S. J. Edelstein, 1104
- Cattabeni, F., et al.: Gas chromatographic-mass spectrometric assay of four indole alkylamines of rat pineal, 166
- Cebra, J. J. (Research News): 1972 Nobel prize for physiology or medicine, 384
- Cell culture on artificial capillaries: an approach to tissue growth in vitro, R. A. Knazek et al., 65
- Cells and tissues of the immune system, The, L. WEISS, book review by B. F. Argryis, 49
- Centifanto, Y. M., et al.: Herpesvirus type 2 in the male genitourinary tract, 318
- Centric fusion and trisomy for the LDH-B locus in brook trout, *Salvelinus fontinalis*, M. T. Davison et al., 992
- Ceramidase deficiency in Farber's disease (lipogranulomatosis), M. Sugita et al., 1100
- Cervetto, L., and E. F. MacNichol, Jr.: Inactivation of horizontal cells in turtle retina by glutamate and aspartate, 767
- CHANTRY, G. W., Submillimetre spectroscopy, book review of, 1085
- Chapman, D., et al.: Electricity demand growth and the energy crisis, 703; erratum, 1078
- Chapman, K. R. See Milton, J. C. D.
- Charlson, R. J. See Hodge, P. M., et al.
- Chemical statics and kinetics of solutions, The, E. A. M. HUGHES, book review by R. E. Weston, Jr., 741
- Chemical trail-following by flying insects: a mechanism for orientation to a distant odor source, S. R. Farkas and H. H. Shorey, 67
- Chemistry and biochemistry of nitrogen fixation, The, J. R. POSTGATE (Ed.), book review by C. C. Delwiche, 1082
- Chen, S. See Coles, L. S., et al.
- Cheney, D. L. See Hitzemann, R. J., et al.
- Chervenick, P. A., and A. F. LoBuglio: Human blood monocytes: stimulators of granulocyte and mononuclear colony formation in vitro, 164
- Chessin, M.: Bureaucracy (letter), 11
- Chimpanzee bipedalism: cineradiographic analysis and implications for the evolution of gait, F. A. Jenkins, Jr., 877
- Cholesterol dissolution rate in micellar bile acid solutions: retarding effect of added lecithin, W. I. Higuchi et al., 633
- Choline: high-affinity uptake by rat brain synaptosomes, H. I. Yamamura and S. H. Snyder, 626
- Chothia, C. See Baker, R. W., et al.
- Chow, T. J., et al.: Lead aerosol baseline: concentration at White Mountain and Laguna Mountain California, 401
- Chromatid breakage: differential effect of inhibitors of DNA synthesis during  $G_2$  phase, M. Karon and W. F. Benedict, 62
- Chromosome mapping in the mouse, D. A. Miller and O. J. Miller, 949
- Chronic thyroiditis in the rabbit induced with homologous thyroid microsomes, M. Mangkornkanok et al., 316
- Circadian corticosteroid periodicity: critical period for abolition by neonatal injection of corticosteroid, D. T. Krieger, 1205
- Circadian involvement in termination of

- the refractory period in two sparrows, F. W. Turek, 1112
- Citation analysis as a tool in journal evaluation, E. Garfield, 471
- Clabough, J. W. See Norvell, J. E.
- Clark, T. A. See Hinteregger, H. F., et al.
- See also Preston, R. A., et al.
- Clayton, D. L., and J. V. Palletta: Selection for circadian eclosion time in *Drosophila melanogaster*, 994
- Clements, J. A. See Gould, K. G., Jr., et al.
- Clymer, A. B. See Matin, E., et al.
- Cochran, R. C., and F. Engelman: Echinoid spawning induced by a radial nerve factor, 423
- COHEN, D. See JENCKS, C., et al.
- Cohen, M. J. See Pitman, R., et al.
- Cohen, R. L.: Mössbauer spectroscopy: recent developments, 828
- Coherin: a new peptide of the bovine neurohypophysis with activity on gastrointestinal motility, I. Goodman and R. B. Hiatt, 419
- Cohn, R., et al.: Summated cortical evoked response testing in the deafferented primate, 1113
- Cole, J. R., and S. Cole: The Ortega hypothesis, 368
- Cole, S. See Cole, J. R.
- Coles, L. S., et al.: Computers and society (letters), 561
- Collagen synthesis in *Xenopus* oocytes after injection of nuclear RNA of frog embryos, J. W. Rollins and R. A. Flickinger, 1204
- Come, now, and let us reason together (editorial), M. Rees, 1155
- Cometary hydrogen and hydroxyl comas, M. K. Wallis and A. H. Delsemme, 78
- Computers and society (letters), L. S. Coles et al., 561
- CONDON, E. U., and O. SINANOGLU (Eds.), New directions in atomic physics, book review of, 740
- Conn, H. See Folkman, J., et al.
- Conney, A. H., and Burns, J. J.: Metabolic interactions among environmental chemicals and drugs, 576
- Conway, B. P. See Maddison, S. E., et al.
- Corliss, J. O.: Priority and stability in zoological nomenclature: resolution of the problem of article 23b at the Monaco Congress, 1120
- Costa, E. See Cattabeni, F., et al. See also Hitzemann, R. J., et al.
- Counselman, C. C., III. See Greenberg, R. J., et al.
- Counselman, C. C., III, et al.: Astronomical applications of differential interferometry, 607
- Courtesy (letter), L. G. Silversmith, 11
- Covers: artificial cloud formation (3 Nov.); cross section of salt bush leaf (8 Dec.) fission track sunbursts (20 Oct.); "frozen-thawed" mouse pups (27 Oct.); internal melting of tyndall flowers in ice-single crystal (10 Nov.); intersex triploid chicken (24 Nov.); lunar topography (1 Dec.); polystyrene spherules (17 Nov.); portrait by Louis Pasteur (22 Dec.); Salton Sea and Imperial Valley (6 Oct.); stridulatory file of Uhler's katydid (13 Oct.); ultraviolet-reflecting wing scale of butterfly (15 Dec.)
- Cracks and pores: a closer look, W. F. Brace et al., 162
- Craig, P. P. See Hughes, J. T., et al.
- CREED, R. (Ed.), Ecological genetics and evolution, book review of, 855
- Croford, O. B.: book review of Insulin action, 856
- CRONBACH, L. J., et al., The dependability of behavioral measurements, book review of, 1275
- Crook, J. H.: book review of The evolution of primate behavior, 48
- Cross, F. A. See Barber, R. T., et al.
- Cruickshank, A. M. (meeting report): Gordon Research Conferences: winter program, 1973, 653
- Crustal spreading in southern California, W. A. Elders et al., 15
- Crystal structure of krypton difluoride at  $-80^{\circ}\text{C}$ , R. D. Burbank et al., 1285
- Culliton, B. J. (News and Comment): AMA specialty journals must lure paying subscribers, 1070; Cancer Advisory Board, 479; Chinese doctors to visit the United States, 42; Cooley's anemia, 590; health hierarchy and some firings, 1268; Institute of Aging gets veto, 843; scientist wins \$16 million for loss of support, 1177; sickle cell anemia, 138, 283
- CUNNINGHAM, M., Intelligence, book review of, 971
- Curare and pancuronium compared: effects on previously undepressed mammalian myoneural junctions, A. Galindo, 753
- Cutaneous "rabbit," The: a perceptual illusion, F. A. Geldard and C. E. Sherrick, 178
- Cytotoxic antibody in normal human sera reactive with tumor cells from acute lymphocytic leukemia, W. B. Bias et al., 304
- Czombos, J. See Meienhofer, J., et al.

## D

- Dairman, W. See Udenfriend, S., et al.
- Danby, J. M. A.: book review of Astro-dynamics, 153
- Davis, R. H.: Metabolite distribution in cells, 835
- Davison, M. T., et al.: Centric fusion and trisomy for the LDH-B locus in brook trout, *Salvelinus fontinalis*, 992
- Dawes, R. M., et al.: IQ: methodological and other issues (letters), 229
- Day, R. H. See McKenzie, B. E.
- DDT in rainfall (letters), J. T. Hughes et al., 450
- Deardorf, K. R. See Hedges, J.
- Deardourff, S. L. See Centifanto, Y. M., et al.
- Dedrick, R. L. See Knazek, R. A., et al.
- DeFreitas, A. S. W. See Hutzinger, O., et al.
- del Jones, D., et al.: North Vietnamese science (letters), 113
- Delsemme, A. H. See Wallis, M. K.
- Delwiche, C. C.: book review of The chemistry and biochemistry of nitrogen fixation, 1082
- Dependability of behavioral measurements, The, L. J. CRONBACH et al., book review by R. D. Bock, 1275
- DES residues (letters), J. C. Nofziger et al., 117
- Detergent effects on a reverse transcriptase activity and on inhibition by rifamycin derivatives, F. M. Thompson et al., 505
- Dew, D. See Walker, T. J.
- Diabetes mellitus and the gene for Fanconi's anemia, M. Swift et al., 308
- Dichgans, J., et al.: Moving visual scenes influence the apparent direction of gravity, 1217
- Dichloromethane and lettuce seed germination, J. D. Anderson et al., 1309
- Direct phase determination from neutron diffraction data of the structure of melampodin, I. Bernal and S. F. Watkins, 1282
- Dispersal of rabbit lung into individual viable cells: a new model for the study of lung metabolism, K. G. Gould, Jr., et al., 1209
- Dorfman, A. See Stoolmiller, A. C., et al.
- Dowling, J. E. See West, R. W.
- Dragovich, J. A. See Margules, D. L., et al.
- Drugs and the public, N. E. ZINBERG and

J. A. ROBERTSON, book review by R. H. Blum, 151

Drylie, D. M. See Centifanto, Y. M., et al.

Dudkiewicz, A. B. See Shivers, C. A., et al.

Duffy, J.: book review of American physicians in the nineteenth century, 975

Dulaney, J. T. See Sugita, M., et al.

Dunks, G. B. See Hawthorne, M. F.

Dunn, P. J. See Smith, D. E., et al.

Dynamics of meristem cell populations, The, M. W. MILLER and C. C. KUEHNERT (Eds.), book review by W. A. Jensen, 973

## E

Earl, J. L. See Chow, T. J., et al.

Eastern Atlantic continental margin: some results of the 1972 cruise of the R.V. Atlantis II, K. O. Emery, 298

Echinoid spawning induced by a radial nerve factor, R. C. Cochran and F. Engelman, 423

Ecological genetics and evolution, R. CREED (Ed.), book review by H. L. Carson, 855

Ecology of animals, The, N. P. NAUMOV, book review by C. J. Krebs, 1082

Edelstein, S. J. See Hamilton, M. N.

Editorials: Adjusting to normal times, 1045; Come, now, and let us reason together, 1155; The election, politics, and higher education, 1243; Energy conservation, 355; Latin American aspirations, 13; Misrepresented by "women's lib," 565; More women for higher education, 815; A philosophy for technology, 245; The quest for environmental indices, 121; Reliability of consumer goods, 937; Science and values, 453; Science, technology, and diplomacy, 701

Edsall, J. T., and A. Boba: Linus Pauling and vitamin C (letters), 696

Edsall, J. T., and A. M. Weinberg: Nuclear energy (letters), 933

Effect of colchicine, Colcemid, and vinblastine on the agglutination, by concanavalin A, of transformed cells, H. H. Yin et al., 867

Eichelman, B. See Thoa, N. B., et al.

Eisner, T. See Ghiradella, H., et al.

Elders, W. A., et al.: Crustal spreading in southern California, 15

Election, politics, and higher education, The (editorial), J. C. Honey, 1243

Electrical behavior of cartilage during loading, C. A. L. Bassett and R. J. Pawluk, 982

Electrical responses of insect central neurons: augmentation by nerve section or colchicine, R. Pitman et al., 507

Electricity demand growth and the energy crisis, D. Chapman et al., 703; erratum, 1078

Electrodynamic sailing: beating in the solar wind, C. P. Sonnet et al., 1115

Electron microscopy and structure of materials, G. THOMAS et al. (Eds.), book review by V. A. Phillips, 857

Electron microscopy in material science, U. VALDRÉ (Ed.), book review by V. A. Phillips, 857

Electronic characterization of solid surfaces, H. D. Hagstrum, 275

Elliott, J. A., et al.: Regulation of testis function in golden hamsters: a circadian clock-measures photoperiodic time, 771

Emery, K. O.: Eastern Atlantic continental margin: some results of the 1972 cruise of the R.V. Atlantis II, 298

Emiliani, C.: Quaternary paleotemperatures and the duration of the high-temperature intervals, 398

Encyclopedia of geochemistry and environmental sciences, R. W. FAIRBRIDGE (Ed.), book review by O. P. Bricker, 1277



- Energy conservation (*editorial*), P. H. Abelson, 355
- Engberg, L. A., *et al.*: Acquisition of key-pecking via autoshaping as a function of prior experience: "learned laziness"? 1002
- Engelmann, F. See Cochran, R. C.
- Environmental sciences (AAAS), 321
- Epplé, A. See Lewis, T. L.
- Epstein, S. S. See Nofziger, J. C., *et al.*
- Ergas, R. A. See Hinteregger, H. F., *et al.*
- See also Preston, R. A., *et al.*
- Errata: for D. Chapman *et al.* (17 Nov., p. 703), 1078; for E. Matin *et al.* (13 Oct., p. 179), 796
- Etymological purity (*letter*), G. H. Bourne, 812
- Evaluation of infant intelligence, M. Lewis and H. McGurk, 1174
- Evans, H. E. See Wilson, E. O., *et al.*
- Evans, L. G. See Fainberg, J., *et al.*
- Evidence for active immunity to morphine in mice, B. Berkowitz and S. Spector, 1290
- Evidence for the neutral hypothesis of protein polymorphism, T. Yamazaki and T. Maruyama, 56
- Evoked brain potentials in psychiatry, C. SHAGASS, *book review* by H. G. Vaughan, Jr., 150
- Evoked potentials in psychology, sensory physiology and clinical medicine, D. REGAN, *book review* by H. G. Vaughan, Jr., 150
- Evolution of genetic systems, H. H. SMITH (Ed.), *book review* by R. P. Wagner, 605
- Evolution of primate behavior, The, A. JOLLY, *book review* by J. H. Crook, 48
- Exploring new ethics for survival, G. HARDIN, *book review* by G. M. Woodwell, 1192
- Expression of lactate and malate dehydrogenase in tumors induced by SV40 and 7,12-dimethylbenz(a)anthracene, R. Prasad *et al.*, 70
- Eyes have a role in photoperiodic control of sexual activity of *Coturnix*, K. Homma *et al.*, 421
- Eysenck, H. J. See Dawes, R. M., *et al.*
- F**
- Fainberg, J., *et al.*: Radio tracking of solar energetic particles through interplanetary space, 743
- FAIRBRIDGE, R. W. (Ed.), The encyclopedia of geochemistry and environmental sciences, *book review* of, 1277
- Falconer, W. E. See Burbank, R. D., *et al.*
- Falling watermelons (*letter*), C. Adler, 450
- Farkas, S. R., and H. H. Shorey: Chemical trail-following by flying insects: a mechanism for orientation to a distant odor source, 67
- Farley, C. A., *et al.*: Oyster herpes-type virus, 759
- Farrar, T. C. See Becker, E. D.
- Farrell, E.: The Hue massacre (*letter*), 1041
- Fast breeder reactors (*letter*), K. A. Hub, 1240
- Faull, J. R., and B. P. Halpern: Taste stimuli: time course of peripheral nerve response and theoretical models, 73
- Fay, L. E.: Ideal setting (*letter*), 1041
- Federal project grants (*letter*), C. M. Blair, 1041
- Feeny, P.: *book review* of Phytochemical ecology, 1084
- Felig, P. See Wise, J. K., *et al.*
- Felts, J. M. See Gould, K. G., Jr., *et al.*
- Fermat's mathematics: proofs and conjectures, M. S. Mahoney, 30
- Fernstrom, J. D., and R. J. Wurtman: Brain serotonin content: physiological regulation by plasma neutral amino acids, 414
- Feshbach, H. See Panofsky, W. K. H., *et al.*
- Fever: reciprocal shift in brain sodium to calcium ratio as the set-point temperature rises, R. D. Myers and M. Tytell, 765
- FISHER, R. M. See THOMAS, G., *et al.*
- Fitch, F. W. See Wainer, B. H., *et al.*
- Flagellar movement: a sliding filament model, C. J. Brokaw, 455
- Fleischer, R. L., *et al.*: Particle track etching, 255
- Flickinger, R. A. See Rollins, J. W.
- Fluidity of simple liquids—reply to a criticism, J. H. Hildebrand, 1120
- Fossilization of Bermuda patch reefs, T. P. Scoffin, 1280
- Fotino, M. See Levine, B. B., *et al.*
- Fluorescamine: a reagent for assay of amino acids, peptides, proteins, and primary amines in the picomole range, S. Udenfriend *et al.*, 871
- Folkman, J., *et al.*: Acrylamide polymerization: new method for determining the oxygen content in blood, 170
- FONER, A. See RILEY, M. W., *et al.*
- Ford, B. See Rothschild, M.
- Foster, W. S. See Farley, C. A., *et al.*
- Foundations of acoustics, The, E. SKUDRZYK, *book review* by R. T. Beyer, 497
- Fourier transform spectroscopy, E. D. Becker and T. C. Farrar, 361
- Franklin, L. E. See Shivers, C. A., *et al.*
- FRETWELL, S. D.: Population in a seasonal environment, *book review* of, 48
- Fried, J. See Wainer, B. H., *et al.*
- Fried, M.: *book review* of Biochemistry and pharmacology of free fatty acids, 1277
- Friedmann, T. See Neufeld, E. F., *et al.*
- FRITZ, I. B. (Ed.), Insulin action, *book review* of, 856
- Fuller, M.: The remanent magnetization of lunar soils, 154
- FULRATH, R. M. See THOMAS, G., *et al.*
- Funding of research, The (*letter*), P. E. Hartman, 811
- Furman, S. C. See Fleischer, R. L., *et al.*
- Fussell, E. N. See Shivers, C. A., *et al.*
- G**
- Galactokinase: evidence for a new racial polymorphism, T. A. Tedesco *et al.*, 176
- Galilean satellites: Identification of water frost, C. B. Pilcher *et al.*, 1087
- Galindo, A.: Curare and pancuronium compared: effects on previously unexpressed mammalian myoneural junctions, 753
- Gal-Or, B., and R. G. Sachs: Time reversal and irreversibility, 1119
- Galston, A. W. See del Jones, F., *et al.*
- Gardening ants, the attitudes, N. A. WEBER, *book review* by P. B. Kannonowski, 856
- Garfield, E.: Citation analysis as a tool in journal evaluation, 471
- Gas chromatographic-mass spectrometric assay of four indole alkylamines of rat pineal, F. Cattabeni *et al.*, 166
- Gas exchange in dry seeds: circadian rhythmicity in the absence of DNA replication, transcription, and translation, T. R. Bryant, 634
- Gavin, J. R., III, *et al.*: Water-soluble insulin receptors from human lymphocytes, 168
- Gebert, R. See Weinstein, I. B., *et al.*
- Geldard, F. A., and C. E. Sherrick: The cutaneous "rabbit": a perceptual illusion, 178
- Gelfant, S., and J. G. Smith, Jr.: Aging: noncycling cells an explanation, 357
- Gene therapy for human genetic disease?, E. F. Neufeld *et al.*, 648
- Genetic control of insect populations, R. H. Smith and R. C. von Borstel, 1164
- Genetic mapping of a murine leukemia virus-inducing locus of AKR mice, W. P. Rowe *et al.*, 860
- Genital sensory field: enlargement by estrogen treatment in female rats, B. R. Komisaruk *et al.*, 1295
- Geographical ecology, R. H. MAC ARTHUR, *book reviews* by T. W. Schoener and S. A. Boorman, 389
- Gerischer, H.: *book review* of Reactions of molecules at electrodes, 1194
- Ghiradella, H., *et al.*: Ultraviolet reflection of a male butterfly: interference color caused by thin-layer elaboration of wing scales, 1214
- Gill, F., *et al.*: Hemoglobin Lepore trait: globin synthesis in bone marrow and peripheral blood, 623
- Gillette, R. (*News and Comment*): H. Allen Smith Jet Propulsion Laboratory, 1178; Apollo and science on the shelf, 1265; Office of Technology Assessment moves ahead, 41; politics of the ocean, 729; radiation standards, 966; reactor safety 482; science and the "new federalism," 141; scientists in politics, 375
- Gilman, J. G.: Hemoglobin beta chain structural variation in mice: evolutionary and functional implications, 873
- Gilmour, D. See Swift, M., *et al.*
- GINTIS, H. See JENCKS, C., *et al.*
- Glaser, C. B. See Meienhofer, J., *et al.*
- GLASS, D. C., and J. E. SINGER, Urban stress, *book review* of, 1275A
- GLESER, G. C. See CRONBACH, L. J., *et al.*
- Glickstein, M., *et al.*: Visual input to the pontine nuclei, 1110
- Goetze, C. See Brace, W. F., *et al.*
- Gold, R. M. See Bartoshuk, L. M., G. Kapatos, R. M. Gold
- Goldberg, A. M., and B. L. Welch: Adaptation of the adrenal medulla: sustained increase in choline acetyltransferase by psychosocial stimulation, 319
- Goldberg, M.: Adequate protection (*letter*), 1151
- Golub, A. M. See Bryant, R. C., *et al.*
- Goodman, I., and R. B. Hiatt: Coherin: a new peptide of the bovine neurohypophysis with activity on gastrointestinal motility, 419
- Goran, M.: Understanding science (*letter*), 352
- Gordon, A. S.: *book review* of Haemopoietic cells, 974
- Gordon Research Conferences: winter program, 1973 (*meeting report*), A. M. Cruickshank, 653
- Gordon, T. P. See Rose, R. M., *et al.*
- Gorovitz, S.: Reflections on campus pessimism, 586
- Gould, K. G., Jr., *et al.*: Dispersal of rabbit lung into individual viable cells: a new model for the study of lung metabolism, 1209
- GRANIT, R.: Mechanisms regulating the discharge of motoneurons, *book review* of, 49
- Gravitation theory: empirical status from solar system experiments, K. L. Nordtvedt, Jr., 1157
- Gravitational effects on concentrations and partial pressures in solutions: a thermodynamic analysis, F. C. Andrews, 1199
- Great ocean business, The, B. HORSFIELD and P. B. STONE, *book review* by H. W. Menard, 1084
- Greenberg, R. J., *et al.*: Orbit-orbit resonance capture in the solar system, 747
- Greengard, P. See McAfee, D. A.
- Griffin, J. L.: Temperature tolerance of pathogenic and nonpathogenic free-living amoebas, 869



- Grobman, H.: Brazil (*letter*), 9  
 Growth hormone responses to L-dopa in depressed patients, E. J. Sacher *et al.*, 1304  
 Growth question and environmental policy issues (*AAAS*), 425  
 Gullino, P. M. See Knazek, R. A., *et al.*  
 Guttman, H. N. See Malin, D. H.

## H

- Habener, J. F., *et al.*: Parathyroid hormone: biosynthesis by human parathyroid adenomas, 630  
 Haber, A. H. See Anderson, J. D., *et al.*  
 Haberer, J.: Politicalization in science, 713  
 Habituation and dishabituation: interactions between peripheral and central nervous systems in *Aplysia*, K. Lukowiak and J. W. Jacklet, 1306  
 Hadley, K. See Brace, W. F., *et al.*  
 Haemopoietic cells, D. METCALF and M. A. S. MOORE, *book review* by A. S. Gordon, 974  
 HAGINS, W. A. See MORALES, M. F., *et al.*  
 Hagstrum, H. D.: Electronic characterization of solid surfaces, 275  
 Haley, L. See Shows, T. B., *et al.*  
 Hall, T. S.: *book review* of Addison and the white corpuscles, 152  
 HALLIDAY, M. S. See BOAKES, R. A.  
 Halpern, B. P. See Faull, J. R.  
 Hamilton, A. (*News and Comment*): Maine and finding the promised land, 595  
 Hamilton, M. N., and S. J. Edelman: Cat hemoglobin: pH-dependent cooperativity of oxygen binding, 1104  
 Hammond, A. L. (*News and Comment*): Los Alamos Scientific Laboratory, 1075, 1180; (*Research News*): conservation of energy and the potential for more efficient use, 1079; energy needs and projected demands, 1186; fission and the pro's and con's of nuclear power, 147; magnetohydrodynamic power, 386; photovoltaic cells and direct conservation of solar energy, 732  
 Hammond, D. M. See Speer, C. A.  
 Hammond, N.: Obsidian trade routes in the Mayan area, 1092  
 Hanks, T. C. See Anderson, Don L.  
 Hansen, G. See Engberg, L. A., *et al.*  
 Hanson, M. See Sakai, W., *et al.*  
 Hanson, R. C. See McNerney, J. J., *et al.*  
 HARBORNE, J. B. (Ed.), *Phytochemical ecology, book review* of, 1084  
 HARDIN, G.: Exploring new ethics for survival, *book review* of, 1192  
 Harmel, R. See Folkman, J., *et al.*  
 Hartley, J. W. See Rowe, W. P., *et al.*  
 Hartman, P. E.: The funding of research (*letter*), 811  
 Harvey, G. R. See Carpenter, E. J. *et al.*  
 Hawkes, N. (*News and Comment*): Stockholm International Peace Research Institute, 286  
 Hawthorne, M. F., and G. B. Dunks: Metallocarboranes that exhibit novel chemical features, 462  
 Häyry, P. See Nordling, S., *et al.*  
 Health and biology (*AAAS*), 79  
 Hedges, J., and K. R. Deardorf: The natural way (*letter*), 1140  
 Held, R. See Dichgans, J., *et al.*  
 Hemoglobin and myoglobin in their reactions with ligands, E. ANTONINI and M. BRUNORI, *book review* by M. Reichlin, 296  
 Hemoglobin beta chain-structural variation in mice: evolutionary and functional implications, J. G. Gilman, 873  
 Hemoglobin concentration in normal diploid and intersex triploid chickens: genetic inactivation or canalization?, F. Abdel-Hameed, 864  
 Hemoglobin Lepore trait: globin synthesis in bone marrow and peripheral blood, F. Gill *et al.*, 623  
 Hendler, R., See Wise, J. K., *et al.*  
 Herndon, R. M. See Penney, J. B., Jr., *et al.*  
 Herpesvirus *hominis*: isolation from human trigeminal ganglion, F. O. Bastian *et al.*, 306  
 Herpesvirus type 2 in male genitourinary tract, Y. M. Centifanto *et al.*, 318  
 HERRERO, S. (Ed.), Bears, *book review* of, 297  
 HERRICK, S., *Astrodynamics, book review* of, 153  
 HERRIOTT, R. M. See BEERS, R. F., JR., *et al.*  
 HERSHBERGER, W. D. (Ed.), Topics in solid state and quantum electronics, *book review* of, 152  
 Herschman, H. R. See Lerner, M. P.  
 HEYNS, B. See JENCKS, C., *et al.*  
 Hiatt, R. B. See Goodman, I.  
 Hicklin, M. D. See Maddison, S. E., *et al.*  
 High Voltage accelerators (*letters*), J. C. D. Milton and K. R. Chapman, 1041  
 Higuchi, W. I., *et al.*: Cholesterol dissolution rate in micellar bile acid solutions: retarding effect of added lecithin, 633  
 Hildebrand, J. H.: Fluidity of simple liquids—reply to a criticism, 1120  
 Hillslope form and process, M. A. CARSON and M. J. KIRBY, *book review* by S. A. Schumm, 1083  
 Hinteregger, H. F. See Counselman, C. C., III, *et al.* See also Preston, R. A., *et al.*  
 Hinteregger, H. F., *et al.*: Precision geodesy via radio interferometry, 396  
 Hinton, H. E. See Ghiradella, H., *et al.*  
 Hites, R. A., and K. Biemann: Water pollution: organic compounds in the Charles River, Boston, 158  
 Hitzemann, R. J., *et al.*: Narcotic tolerance and dependence and serotonin turnover, 645  
 Ho, I. K. See Hitzemann, R. K., *et al.*  
 Hochachka, P. W., and T. Mustafa: Invertebrate facultative anaerobiosis, 1056  
 Hodge, P. W., *et al.*: Astronomy and air pollution (*meeting report*), 1123  
 Hoffmann, D., and E. L. Wynder: Smoke of cigarettes and little cigars: an analytical comparison, 1197  
 HOLBROOK, K. A. See ROBINSON, P. J.  
 Holden, C. (*News and Comment*): Council of Environmental Quality has turnover, 285; East-West think tank born, 143; Gofman honored and AEC is mum, 597; NAS members appeal on behalf of Soviet colleagues, 1071; Pennsylvania geologists rebuild after flood, 139; women at the University of Michigan, 841, 962  
 Hollis, J. P. See Pitts, G., *et al.*  
 HOLMES, W. L., and W. M. BORTZ (Eds.), *Biochemistry and pharmacology of free fatty acids, book review* of, 1276  
 Holsti, O. R.: *book review* of The private nuclear strategists, 604  
 Homma, K., *et al.*: Eyes have a role in photoperiodic control of sexual activity of *Coturnix*, 421  
 Honey, J. C.: The election, politics, and higher education (*editorial*), 1243  
 HOOS, I. R., Systems analysis in public policy, *book review* of, 739  
 Horowitz, P., and J. A. Howell: A scanning x-ray microscope using synchrotron radiation, 608  
 Houk, J. C. See Walsh, J. V., *et al.*  
 HORSFIELD, B., and P. B. STONE, The great ocean business, *book review* of, 1084  
 Howell, J. A. See Horowitz, P.  
 Hub, K. A.: Fast breeder reactors (*letter*), 1240  
 Hubbard, R. See Dawes, R. M., *et al.*  
 Hue massacre, The (*letter*), E. Farrell, 1041  
 HUGHES, E. A. M., The chemical statics and kinetics of solutions, *book review* of, 741  
 Hughes, J. T., *et al.*: DDT in rainfall (*letters*), 450  
 HUIZINGA, J. See WEINER, J. S.  
 Human blood monocytes: stimulators of granulocyte and mononuclear colony formation in vitro, P. A. Chervenick and A. F. LoBuglio, 164  
 Human-mouse cell hybrids: a suggestion of structural mutation for dipeptidase-2 deficiency in mouse cells, T. B. Shows *et al.*, 58  
 Humphrey, R. L. See Bias, W. B., *et al.*  
 Humphreys, L. G. See Johnson, L. J., *et al.*  
 HUSH, N. S. (Ed.), Reactions of molecules at electrodes, *book review* of, 1194  
 Hutchison, J. See Komisaruk, B. R., *et al.*  
 Hutton, J. J. See Stockert, E., *et al.*  
 Hutzinger, O., *et al.*: Polychlorinated biphenyls: metabolic behavior of pure isomers in pigeons, rats, and brook trout, 312  
 6-Hydroxydopa depletion of brain norepinephrine and the facilitation of aggressive behavior, N. B. Thoa *et al.*, 75  
 HYMAN, H. H., Secondary analysis of sample surveys, *book review* of, 1193  
 Hyman, S. See Oldendorf, W. H., *et al.*  
 Hypothalamic norepinephrine: circadian rhythms and the control of feeding behavior, D. L. Margules *et al.*, 640

## I

- Ibrahim, A. B. See Vyas, G. N., *et al.*  
 Ideal setting (*letter*), L. E. Fay, 1041  
 Implantation of exogenous enzymatic activity in isolated alveolar macrophages, J. Theodore *et al.*, 1302  
 Inactivation of horizontal cells in turtle retina by glutamate and aspartate, L. Cervetto and E. F. MacNichol, Jr., 767  
 Incised river meanders: evolution in simulated bedrock, R. G. Shepherd, 409  
 Inequality, C. JENCKS *et al.*, *book review* by A. L. Stinchcombe, 603  
 Inhibition and learning, R. A. BOAKES and M. S. HALLIDAY (Eds.), *book review* by D. S. Blough, 295  
 Inhibition of sperm-egg interaction by specific antibody, C. A. Shivers *et al.*, 1211  
 Inorganic chemistry of vitamin B<sub>12</sub>, J. M. PRATT, *book review* by G. N. Schrauzer, 51  
 Institutional patterns and societal R & D (*AAAS*), 186  
 Insulin action, I. B. FRITZ (Ed.), *book review* by O. B. Crofford, 856  
 Intelligence, M. CUNNINGHAM, *book review* by M. R. Quillian, 971  
 Interferometric observations of an artificial satellite, R. A. Preston *et al.*, 407  
 Internal gravity wave-atmospheric wind interaction: a cause of clear air turbulence, K. Bekofske and V. C. Liu, 1089  
 Invertebrate facultative anaerobiosis, P. W. Hochachka and T. Mustafa, 1056  
 Ionic basis of the photoresponse of *Aplysia* giant neuron: K<sup>+</sup> permeability increase, H. M. Brown and A. M. Brown, 755  
 Ionospheric effects on the transmission of ultralow-frequency plasma waves, L. J. Lanzerotti *et al.*, 499  
 IQ: methodological and other issues (*letters*), R. M. Dawes *et al.*, 229  
 Is the moon hot or cold?, D. L. Anderson and T. C. Hanks, 1245  
 Itakura, K. See Stockert, E., *et al.*

## J

- Jacklet, J. W. See Lukowiak, K.  
 Jacob, S. T., *et al.*: Mitochondrial polyribadenylate polymerase: relative lack of activity in hepatomas, 639  
 Jacobowitz, D. See Thoa, N. B., *et al.*  
 Jakniunas, A. See Cohn, R., *et al.*

- Jayaweera, K. O. L. F., and T. Ohtake, Artificial cloud formation in the atmosphere, 504
- JENCKS, C., *et al.*, Inequality, book review of, 603
- Jenkins, F. A., Jr.: Chimpanzee bipedalism: cineradiographic analysis and implications for the evolution of gait, 877
- Jensen, W. A.: book review of The dynamics of meristem cell populations, 973
- Johnson, D. D. See Oh, T. H., *et al.*
- Johnson, H. A. See Hughes, J. T., *et al.*
- Johnson, L. J., *et al.*: Population-ethics (letters), 347
- JOHNSON, M. See Riley, M. W., *et al.*
- Johnson, R. T. See Penney, J. B., Jr., *et al.*
- Johnson, T. S. See Smith, D. E., *et al.*
- JOLLY, A.: The evolution of primate behavior, book review of, 48
- Jones, A. L. See Gould, K. G., Jr., *et al.*
- Jones, R. C. See Sakai, W. S., *et al.*
- Joravsky, D.: book review of Politics in science, 495
- Joss, U. R. See Thompson, F. M., *et al.*
- Judd, B. R.: book review of New directions in atomic physics, 740

# K

- Kagan, I. G. See Maddison, S. E., *et al.*
- Kalckar, H. M. See McAfee, R. D.
- Kane, R. E. (meeting report): Microtubules and microfilaments in division and development, 777
- Kannowski, P. B.: book review of Gardening ants, the attines, 856
- Kapatos, G. See Bartoshuk, L. M., G. Kapatios, R. M. Gold
- Karon, M., and W. F. Benedict: Chromatid breakage: differential effect of inhibitors of DNA synthesis during G<sub>2</sub> phase, 62
- Karunakaran, M. E. See Coles, L. S., *et al.*
- Kasnic, G., Jr. See Farley, C. A., *et al.*
- Kaufman, H. E. See Centifanto, Y. M., *et al.*
- Kemper, B. See Habener, J. F., *et al.*
- Kenagy, G. J.: Saltbush leaves: excision of hypersaline tissue by a kangaroo rat, 1094
- KERR, L. E. See KEY, M. M., *et al.*
- KEY, M. M., *et al.*, (Eds.), Pulmonary reactions to coal dust, book review of, 50
- Kim, S. U. See Oh, T. H., *et al.*
- Kimball, R. F.: book review of Molecular and cellular repair processes, 1086
- King, R. A. See Glickstein, M., *et al.*
- KIRBY, M. J. See CARSON, M. A.
- Kleiber, M.: A new Newton's law of cooling?, 1283
- Kline, D. L.: Old-fashioned virtues (letter), 242
- Knazek, R. A., *et al.*: Cell culture on artificial capillaries: an approach to tissue growth in vitro, 65
- Knight, C. A. See Hinteregger, H. F., *et al.* See also Preston, R. A., *et al.*
- Knight, Charles A., and N. C. Knight: Superheated ice: true compression fractures and fast internal melting, 613
- Knight, N. C. See Knight, Charles A.
- Kohler, P. O. See Knazek, R. A., *et al.*
- Kolenkiewicz, R. See Smith, D. E., *et al.*
- Komisaruk, B. R., *et al.*: Genital sensory field: enlargement by estrogen treatment in female rats, 1295
- Koobs, D. H.: Phosphate mediation of the Crabtree and Pasteur effects, 127
- Koslow, S. H. See Cattabeni, F., *et al.*
- Krebs, C. J.: book review of The ecology of animals, 1072
- Krieger, D. T.: Circadian corticosteroid periodicity: critical period for abolition by neonatal injection of corticosteroid, 1205

- Kruskal, W. See Nofziger, J. C., *et al.*
- KUEHNERT, C. C. See MILLER, M. W.
- Kukla, G. J., and R. K. Matthews: When will the present interglacial end? (meeting report), 190
- Kuno, M.: book review of Mechanisms regulating the discharge of motoneurons, 49
- Kuromizu, K. See Meienhofer, J., *et al.*

# L

- Lanzerotti, L. J., *et al.*, Ionospheric effects on the transmission of ultralow-frequency plasma waves, 499
- Latin American aspirations (editorial), P. H. Abelson, 13
- Lauger, P.: Carrier-mediated ion transport, 24
- Laulainen, N. See Hodge, P. W., *et al.*
- Lead aerosol baseline: concentration at White Mountain and Laguna Mountain, California, T. J. Chow *et al.*, 401
- Lead content of human hair (1871-1971). D. Weiss *et al.*, 69
- Leddy, D. See Weiss, D., *et al.*
- Leder, P. See Aviv, H., *et al.*
- Lee, C.-H. See Bartoshuk, L. M., C.-H. Lee, R. Scarpellino
- Lee, R. E., Jr.: The size of suspended particulate matter in air, 567
- Leibo, S. P. See Whittingham, D. G., *et al.*
- Leimgruber, W. See Udenfriend, S., *et al.*
- Leith, E. N.: book review of Optical transforms, 972
- Lerner, M. P., and H. R. Herschman: S-100 protein synthesis by isolated polyribosomes from rat brain, 995
- Lessons from the history of American broadcasting, S. Scott, 1263
- Levine, B. B., *et al.*: Ragweed hay fever: genetic control and linkage to HL-A haplotypes, 1201
- Levine, J. M. See Zentall, T. R.
- Levitan, H., and J. L. Barker: Membrane permeability: cation selectivity reversibly altered by salicylate, 63
- Levy, E. H.: Magnetic dynamo in the moon: a comparison with the earth, 52
- Levy, N. L., *et al.*: Bone marrow-derived lymphoid cells (B cells): functional depletion with cobra factor and fresh serum, 866
- Lewis, M., and H. McGurk: Evaluation of infant intelligence, 1174
- Lewis, M. J. See Margules, D. L., *et al.*
- Lewis, T. L., and A. Epple: Pancreatectomy in the eel: effects on serum glucose and cholesterol, 1286
- Libertini, L. J. See Thompson, F. M., *et al.*
- LICKLIDER, R. E., The private nuclear strategists, book review of, 604
- Lie, H. P. See Lanzerotti, L. J., *et al.*
- Life of Benjamin Banneker, The, S. A. BEDINI, book review by D. F. Musto, 151
- Lijinsky, W. See Nofziger, J. C., *et al.*
- Lill, G.: Marine discoveries (letter), 10
- Limiting factors in phytoplankton algae: their meaning and measurement, W. J. O'Brien, 616
- Linus Pauling and vitamin C (letters), J. T. Edsall and A. Boba, 696
- LIPSON, H., Optical transforms, book review of, 972
- Liu, V. C. See Bekofske, K.
- LoBuglio, A. F. See Chervenick, P. A.
- Location of the second gene required for expression of the leukemia-associated mouse antigen G<sub>1x</sub>, E. Stockert *et al.*, 862

- Logan, W. J. See Bennett, J. P., *et al.*
- Loh, H. H. See Hitzemann, R. J., *et al.*
- Longacre, W. A., and R. G. Vivian: Salvage archeology (letter), 811
- Louis Pasteur sesquicentennial (1822-1972), J. R. Porter, 1249
- Lovell, W. S.: Breath tests for determining alcohol in the blood, 264
- Loyd, B. See Aviv, H., *et al.*
- Lukowiak, K., and J. W. Jacklet: Habituation and dishabituation: interactions between peripheral and central nervous systems in *Aplysia*, 1306
- Lunar topography: first radar-interferometer measurements of the Alphonsus-Ptolemaeus-Arzachel region, S. H. Zisk, 977
- Lunar topography: global determination by radar, I. I. Shapiro *et al.*, 939
- Luria, S. E.: McGovern's conversion program (letter), 229
- Lutges, M. W. See Andry, D. K.
- Lynch, R. G.: "Women's lib" (letter), 11

# M

- MAC ARTHUR, R. H., Geographical ecology, book reviews of, 389
- MacDonald, W. E.: More parts per million (letter), 934
- Machol, R. E. See Nofziger, J. C., *et al.*
- MACKRIS, C. J. (Ed.), Physics of the solar corona, book review of, 1085
- MacNichol, E. F., Jr. See Cervetto, L.
- Maddison, S. E., *et al.*: Transfer factor: delayed hypersensitivity to *Schistosoma mansoni* and tuberculin in *Macaca mulatta*, 757
- Maddox, G. L.: book review of Aging and society, 294
- Maeda, H. See Meienhofer, J., *et al.*
- Magnetic dynamo in the moon: a comparison with the earth, E. H. Levy, 52
- Mahoney, M. S.: Fermat's mathematics: proofs and conjectures, 30
- Malin, D. H., and H. N. Guttman: Synthetic rat scotophobin induces dark avoidance in mice, 1219
- Mangkornkanok, M., *et al.*: Chronic thyroiditis in the rabbit induced with homologous thyroid microsomes, 316
- Manoharan, A. See Coles, L. S., *et al.*
- Maps and man, N. J. W. THROWER, book review by J. C. Stone, 606
- Margules, A. S. See Margules, D. L., *et al.*
- Margules, D. L., *et al.*: Hypothalamic norepinephrine: circadian rhythms and the control of feeding behavior, 640
- Marine discoveries (letter), G. Lill, 10
- Markowitz, A. S. See Mangkornkanok, M., *et al.*
- Marolla, F. See Stein, Z., *et al.*
- Marshall, A.: Upper Paleolithic notation and symbol, 817
- Martell, E. A.: Safety at Rocky Flats (letter), 350
- Maruyama, T. See Yamazaki, T.
- Marvin Gardens revisited (letter), A. M. Reiner and E. Becker, 1041
- Marx, J. L. (Research News): cyclic AMP in brain, 1188; phthalic acid esters, 46; "viroids"—a new kind of pathogen?, 734
- Marx, S. J., *et al.*: Calcitonin receptors of kidney and bone, 999
- Matin, E., *et al.*: Metacontrast and saccadic suppression, 179; erratum, 796
- Matin, L. See Matin, E., *et al.*
- Matthews, R. K. See Kukla, G. J.



- Maugh, T. H., II (*Research News*): frog shortage possible this winter, 387; fuel cells, 1274; fuel from wastes, 599; gasification, 44; hydrogen as synthetic fuel of the future 849; polychlorinated biphenyls, 388
- Maxwell, L. R., Sr. See Weisman, I. D., et al.
- May, J. See Shows, T. B., et al.
- Mazur, P. See Whittingham, D. G., et al.
- McAfee, D. A., and P. Greengard: Adenosine 3',5'-monophosphate: electrophysiological evidence for a role in synaptic transmission, 310
- McAfee, R. D., and H. M. Kalckar: Survival of *Rana pipiens* in deionized water, 183
- McCall, R. B., et al.: Similarity in developmental profile among related pairs of human infants, 1004
- McConnell, J. V. See Bryant, R. C., et al.
- McCord, T. B. See Pilcher, C. B., et al.
- and J. B. Adams: Mercury: surface composition from the reflection spectrum, 745
- McGovern's conversion program (*letter*), S. E. Luria, 229
- McGurk, H. See Lewis, M.
- McKenzie, B. E., and R. H. Day: Object distance as a determinant of visual fixation in early infancy, 1108
- McLane, M.: Sandstone: secular trends in lithology in southwestern Montana, 503
- McMullen, W. A. See Nofziger, J. C., et al.
- McNerney, J. J., et al.: Mercury detection by means of thin gold films, 611
- McNulty, P. J., et al.: Visual sensations induced by relativistic nitrogen nuclei, 160
- Mechanisms regulating the discharge of motoneurons, R. GRANIT, *book review* by M. Kuno, 49
- MEDICAL REVOLUTIONARY COMMITTEE OF HUNAN, Nongcum-yisheng shouce (peasant village physician's handbook), *book review* of, 394
- Meeting Reports: Arene oxides: biochemistry and metabolism, 779; Astronomy and air pollution, 1123; Gordon Research Conferences: winter program, 1973, 653; Microtubules and microfilaments in division and development, 777; Organization of energy-transducing membranes: report of a joint Japan-United States seminar, 1122; When will the present interglacial end?, 190
- Meidav, T. See Elders, W. A., et al.
- Meienhofer, J., et al.: Primary structure of neocarzinostatin, an antitumor protein, 875
- Mellman, W. J. See Tedesco, T. A., et al.
- Membrane permeability: cation selectivity reversibly altered by salicylate, H. Levitan and J. L. Barker, 63
- Memory traces: experimental separation by cycloheximide and electroconvulsive shock, D. K. Andry and M. W. Luttiges, 518
- Menaker, M. See Elliott, J. A., et al.
- Menard, H. W.: *book review* of The great ocean business, 1084
- Mercury concentration in recent and ninety-year-old benthopelagic fish, R. T. Barber et al., 636
- Mercury detection by means of thin gold films, J. J. McNerney et al., 611
- Mercury: surface composition from the reflection spectrum, T. B. McCord and J. B. Adams, 745
- Metabolic interactions among environmental chemicals and drugs, A. H. Conney and J. J. Burns, 576
- Metabolite distribution in cells, R. H. Davis, 835
- Metacontrast and saccadic suppression, E. Matin et al., 179; *erratum*, 796
- Metalloporphyrins that exhibit novel chemical features, M. F. Hawthorne and G. B. Dunks, 462
- METCALF, D., and M. A. S. MOORE, Haemopoietic cells, *book review* of, 974
- Metz, W. D. (*Research News*): black hole in our galaxy?, 488; decline of the Hubble constant, 600; magnetic containment fusion, 291; new means of transmitting electricity, 968; particle physics, 852; Princeton tokamak proves a principle for fusion, 1274B
- Metzgar, R. S., et al.: Antigens specific for human lymphocytic and myeloid leukemia cells: detection by nonhuman primate antisera, 986
- MICHELSON, S. See JENCKS, C., et al.
- Mickey, M. R. See Opelz, G., et al.
- Microtubules and microfilaments in division and development (*meeting report*), R. E. Kane, 777
- Miklas, H. P. See Carpenter, E. J., et al.
- Milgram, S.: *book review* of The social construction of communities, 494
- Miller, D. A., and O. J. Miller: Chromosome mapping in the mouse, 949
- Miller, D. S. See Metzgar, R. S., et al.
- Miller, G. P.: A philosophy for technology (*editorial*), 245
- Miller, K. See Tedesco, T. A., et al.
- MILLER, M. W., and C. C. KUEHNERT (Eds.), The dynamics of meristem cell populations, *book review* of, 973
- Miller, O. J. See Miller, D. A.
- Miller, S. L. See Van Trump, J. E.
- Milton, J. C. D., and K. R. Chapman: High Voltage accelerators (*letters*), 1041
- Misrepresented by "women's lib" (*editorial*), S. Artandi, 565
- Mitochondrial polyribadenylate polymerase: relative lack of activity in hepatomas, S. T. Jacob et al., 639
- Moberg, C.-A.: *book review* of An archaeological perspective, 741
- Modern taxonomy (*letters*), E. O. Wilson et al., 1151
- Mohanakumar, T. See Metzgar, R. S., et al.
- Molecular and cellular repair processes, R. F. BEERS, JR., et al. (Eds.), *book review* by R. F. Kimball, 1086
- Molecular structure of LSD, R. W. Baker et al., 614
- Monographie der familie Platypodidae, Coleoptera, K. E. SCHEDL, *book review* by S. L. Wood, 1085
- Montgomery, J. C. See Johnson, L. J., et al.
- MOORE, M. A. S. See METCALF, D.
- MORALES, M. F., et al., Annual review of biophysics and bioengineering, *book review* of, 1083
- Moran, J. M. See Hinteregger, H. F., et al.
- More parts per million (*letter*), W. E. MacDonald, 934
- More women for higher education (*editorial*), B. M. Vetter, 815
- Morison, R. S.: Adjusting to normal times (*editorial*), 1045
- Morris, H. P. See Jacob, S. T., et al. See also Sato, K., et al.
- Moser, H. W. See Sugita, M., et al.
- Mosher, C. A.: Needs and trends in congressional decision-making, 134
- Mössbauer spectroscopy: recent developments, R. L. Cohen, 828
- Motility of macrogamonts of *Eimeria magna* (Coccidia) in cell culture, C. A. Speer and D. M. Hammond, 763
- Mount, T. See Chapman, D., et al.
- Moving visual scenes influence the apparent direction of gravity, J. Dichgans et al., 1217
- Mugnaini, E. See Walsh, J. V., et al.
- Mullins, G. M. See Bias, W. B., et al.
- Munson, R. D., et al.: Uranium in runoff, 77
- Murine leukemia virus: restriction in fused permissive and nonpermissive cells, R. W. Tennant and C. B. Richter, 516
- Muscle biology, R. G. CASSENS (Eds.), *book review* by M. Bárány, 973
- Mushrush, G. See Sachar, E. J., et al.
- Mustafa, T. See Hochachka, P. W.
- Musto, D. F.: *book review* of The life of Benjamin Banneker, 151
- Myers, N., National parks in savannah Africa, 1255
- Myers, R. D., and M. Tytell: Fever: reciprocal shift in brain sodium to calcium ratio as the set-point temperature rises, 765

## N

- Nagy, K. A., et al.: Temperature regulation by the inflorescence of philodendron, 1195
- Nakao, M. See Packer, L.
- NANDA, H. See CRONBACH, L. J., et al.
- Narayan, O. See Penney, J. B., Jr., et al.
- Narcotic tolerance and dependence and serotonin turnover, R. J. Hitzemann et al., 645
- NAS physics report (*letters*), W. K. H. Panofsky et al., 449
- Nash, D. M. See Hutzinger, O., et al.
- National parks in savannah Africa, N. Myers, 1255
- Natural way, The (*letters*), J. Hedges and K. R. Deardorf, 1140
- Nature's highways (*letters*), E. Bolker and N. B. Schwartz, 934
- NAUMOV, N. P., The ecology of animals, *book review* of, 1082
- Needs and trends in congressional decision-making, C. A. Mosher, 134
- Neiman, P. E.: Rous sarcoma virus nucleotide sequences in cellular DNA: measurement by RNA-DNA hybridization, 750
- Nettler, G. See Johnson, L. J., et al.
- Neufeld, E. F., et al.: Gene therapy for human genetic disease?, 648
- Neurotrophic effect on isolated chick embryo muscle in culture, T. H. Oh et al., 1298
- New approach in integrated control: insect juvenile hormone plus a hymenopteran parasite against the stable fly, A. J. E. Wright and G. E. Spates, 1292
- New directions in atomic physics, E. U. CONDON and O. SINANOGLU (Eds.), *book review* by B. R. Judd, 740
- New Newton's law of cooling?, M. Kleiber, 1283
- New perspectives on the Pueblos, A. ORTIZ (Ed.), *book review* by E. H. Spicer, 1275B
- News and Comment: AMA specialty journals must lure paying subscribers, 1070; Apollo and science on the shelf, 1265; Boffey joins Greenberg, 843; Cancer Advisory Board, 479; Chinese doctors to visit the United States, 42; Chinese scientists (nonmedical) to visit United States, 289; Committee on Public Engineering Policy studies program of Research Applied to National Needs, 145, 1270; Congress and election turnover, 726; Cooley's anemia, 590; Council of Environmental Quality has turnover, 285; creationists and evolutionists in California, 724; earthquake accord and the test ban, 38; earthquake research and the pluralistic system, 39; East-West think tank born,



- 143; environmental legislation, 593; Europe and the environment, 381; Gofman honored and AEC is mum, 597; H. Allen Smith Jet Propulsion Laboratory, 1178; health fads, 379; health hierarchy and some firings, 1268; Icelandic fishing, 965; Institute of Aging gets veto, 843; International Agency for Research on Cancer, 844; Los Alamos Scientific Laboratory, 1075, 1180; Maine and finding the promised land, 595; medicine at Michigan State, 36, 288, 377; Nader's Congress project, 142; Nader's profiles, 382; NAS members appeal on behalf of Soviet colleagues, 1071; New York University and red ink, 1072; Office of Technology Assessment moves ahead, 41; Pennsylvania geologists rebuild after flood, 139; politics of the ocean, 729; radiation standards, 966; reactor safety, 482; Roszak, a visionary critic of science, 960; Salk Institute, 846; science and the "new federalism," 141; science shuffle in government agencies, 1077; scientist wins \$16 million for loss of support, 1177; scientists in politics, 375; sickle cell anemia, 138, 283; Stockholm International Peace Research Institute, 286; strip mining issue in Moore-Rockefeller race, 484; technology prize, 1271; U.K. environment minister deplores rule by decree, 144; U.N. environmental program, 1183; weather watch, 144, women at University of Michigan, 841, 962
- Nitrogen fixation by a blue-green epiphyte on pelagic *Sargassum*, E. J. Carpenter, 1207
- Nixon, A. C.: Preserving scientific manpower (*letter*), 696
- Nofziger, J. C., et al.: DES residues (*letters*), 117
- Nongcun yisheng shouce (peasant village physician's handbook), MEDICAL REVOLUTIONARY COMMITTEE OF HUNAN, book review by H. Agren, 394
- Nonlinear spectroscopy, R. G. Brewer, 247
- Nonspecific behavioral effects of substances from mammalian brain, R. C. Bryant et al., 521
- Nordling, S., et al.: Thymus-dependent and thymus-independent lymphocyte separation: relation to exposed sialic acid on cell surface, 1001
- Nordtvedt, K. L., Jr.: Gravitation theory: empirical status from solar system experiments, 1157
- Norstrom, R. J. See Hutzinger, O., et al.
- North Atlantic Ocean: preliminary description of normal modes, G. W. Platzman, 156
- North Vietnamese science (*letters*), F. del Jones et al., 113
- Norvell, J. E., and J. W. Clabough: Adrenergic and cholinergic innervation of the hamster Harderian gland, 1102
- Nuclear energy (*letters*), J. T. Edsall and A. M. Weinberg, 933
- Nutrition and mental performance, Z. Stein et al., 708
- O**
- Obesity: evidence of decreased secretion of glucagon, J. K. Wise et al., 513
- Object distance as a determinant of visual fixation in early infancy, B. E. McKenzie and R. H. Day, 1108
- O'Brien, W. J.: Limiting factors in phytoplankton algae: their meaning and measurement, 616
- Observational learning and social facilitation in the rat, T. R. Zentall and J. M. Levine, 1220
- Obsidian trade routes in the Mayan area, N. Hammond, 1092
- O'Connor, J. D. See Borst, D. W.
- Odell, D. K. See Nagy, K. A., et al.
- Oh, T. H., et al.: Neurotrophic effect on isolated chick embryo muscle in culture, 1298
- Ohtake, T. See Jayaweera, K. O. L. F.
- Old, L. J. See Stockert E., et al.
- Oldendorf, S. Z. See Oldendorf, W. H., et al.
- Oldendorf, W. H., et al.: Blood-brain barrier: penetration of morphine, codeine, heroin, and methadone after carotid injection, 984
- Oldenburg, D. W., and J. N. Brune: Ridge transform fault spreading pattern in freezing wax, 301
- Old-fashioned virtues (*letter*), D. L. Kline, 242
- Olsen, S. J.: book review of Atlas of animal bones, 297
- Opelz, G., et al.: Prolonged survival of second human kidney transplants, 617
- Operations research: some contributions to mathematics, T. L. Saaty, 1061
- Optical transforms, H. LIPSON, book review by E. N. Leith, 972
- Orbit-orbit resonance capture in the solar system, R. J. Greenberg et al., 747
- Orenstein, J. M. See Weinstein, I. B., et al.
- Organization of energy-transducing membranes: report of a joint Japan-United States seminar (*meeting report*), L. Paker, and M. Nakao, 1122
- Origin of the martian chaotic terrains, A. Woronow, 649
- Ortega hypothesis, The, J. R. Cole and S. Cole, 368
- ORTIZ, A. (Ed.), New perspectives on the Pueblos, book review of, 1275B
- Oyster herpes-type virus, C. A. Farley et al., 759
- P**
- Packer, L., and M. Nakao: Organization of energy-transducing membranes: report of a joint Japan-United States seminar (*meeting report*), 1122
- Paietta, J. V. See Clayton, D. L.
- Palmieri, J. N. See Anderson, David L.
- Pancreaticectomy in the eel: effects on serum glucose and cholesterol, T. L. Lewis and A. Eppele, 1286
- Panofsky, W. K. H., et al.: NAS physics report (*letters*), 449
- Paramyxovirus-like particles associated with acute demyelination in chronic relapsing multiple sclerosis, J. Prineas, 760
- Particle track etching, R. L. Fleischer et al., 255
- Pauling, P. See Baker, R. W., et al.
- Pawluk, R. J. See Basset, C. A. L.
- Payer, L. J. (News and Comment): International Agency for Research on Cancer, 844
- Pease, V. P. See McNulty, P. J., et al.
- Peck, B. B. See Carpenter, E. J., et al.
- Penney, J. B., Jr., et al.: Virions from progressive multifocal leukoencephalopathy: rapid serological identification by electron microscopy, 60
- Perlow, M. See Sachar, E. J., et al.
- Perrine, T. D. See Johnson, L. J., et al.
- Pessah, M. A., and H. P. Roffwarg: Spontaneous middle ear muscle activity in man: a rapid eye movement sleep phenomenon, 773
- Peters, J. A. See Schneiderman, M. A.
- PETTJOHN, F. J., et al. Sand and sandstone, book review of, 497
- Phillips, V. A.: book review of Electron microscopy and structure of materials and Electron microscopy in material science, 857
- Philosophy for technology, A (editorial), G. P. Miller, 245
- Phosphate mediation of the Crabtree and Pasteur effects, D. H. Koobs, 127
- Phosphorescence of adsorbed ionic organic molecules at room temperature, E. M. Schulman and C. Walling, 53
- Phosphorylase: a new isozyme in rat hepatic tumors and fetal liver, K. Sato et al., 879
- Physics of the solar corona, C. J. MACKRIS (Ed.), book review by H. Zirin, 1085
- Phytochemical ecology, J. B. HARBORNE (Ed.), book review by P. Feeny, 1084
- Pianka, E. R.: book review of Population in a seasonal environment, 48
- Pierrot-Bults, A. C. See Wilson, E. O., et al.
- Pilcher, C. B., et al.: Galilean satellites: identification of water frost, 1087
- Pines, D., and Slichter, C. P. (Research News): The 1972 Nobel prize for physics, 489
- Pinsky, L. S. See McNulty, P. J., et al.
- Pitman, R., et al.: Electrical responses of insect central neurons: augmentation by nerve section or colchicine, 507
- Pitts, G., et al.: *Beggiatoa*: occurrence in the rice rhizosphere, 988
- Plasma testosterone levels in the male rhesus: influences of sexual and social stimuli, R. M. Rose et al., 643
- Platzman, G. W.: North Atlantic Ocean: preliminary description of normal modes, 156
- Plotkin, H. H. See Smith, D. E., et al.
- Plotnikoff, N. P., et al.: Thyrotropin releasing hormone: enhancement of dopa activity by a hypothalamic hormone, 417
- Point of View: Crusades on cancer: a doubting view, 1184
- Polar motion from laser tracking of artificial satellites, D. E. Smith et al., 405
- Politicalization in science, J. Haberer, 713
- Politics in science, M. BLISSETT, book review by D. Joravsky, 495
- Pollock, S. M.: book review of Systems analysis in public policy, 739
- Polychlorinated biphenyls: metabolic behavior of pure isomers in pigeons, rats, and brook trout, O. Hutzinger et al., 312
- Polystyrene spherules in coastal waters, E. J. Carpenter et al., 749
- Population ethics (*letters*), L. J. Johnson et al., 347
- Population in a seasonal environment, S. D. FRETWELL, book review by E. R. Pianka, 48
- Porter, J. R., Louis Pasteur sesquicentennial (1822-1972), 1249
- POSTGATE, J. R. (Ed.), The chemistry and biochemistry of nitrogen fixation, book review of, 1082
- POTTER, P. E. See PETTJOHN, F. J.
- Potts, J. T., Jr. See Habener, J. F., et al.
- Powers, W. T. See Dawes, R. M., et al.
- Prakongpan, S. See Higuchi, W. I., et al.
- Prange, A. J., Jr. See Plotnikoff, N. P., et al.
- Prasad, N. See Prasad, R., et al.
- Prasad, R., et al.: Expression of lactate and malate dehydrogenase in tumors induced by SV40 and 7,12-dimethylbenz(a)anthracene, 70
- PRATT, J. M., Inorganic chemistry of vitamin B<sub>12</sub>, book review of, 51
- Prebiotic synthesis of methionine, J. E. Van Trump and S. L. Miller, 859
- Precision geodesy via radio interferometry, H. F. Hinteregger et al., 396
- Preserving scientific manpower (*letter*), A. C. Nixon, 696
- Preston, R. A., et al.: Interferometric observations of an artificial satellite, 407
- Price, P. B. See Fleischer, R. L., et al.
- Primary structure of neocarcinostatin, an antitumor protein, J. Meienhofer et al., 875
- Prineas, J.: Paramyxovirus-like particles associated with acute demyelination in chronic relapsing multiple sclerosis, 760

# INDEX TO VOLUME 178

- Priority and stability in zoological nomenclature: resolution of the problem of article 23b at the Monaco Congress, J. O. Corliss, 1120
- Private nuclear strategists, The, R. E. LICKLIDER, book review by O. R. Holsti, 604
- Programs in education (AAAS), 651
- Project Sanguine, J. R. Wait, 272
- Prolonged survival of second human kidney transplants, G. Opelz et al., 617
- Parathyroid hormone: biosynthesis by human parathyroid adenomas, J. F. Habener et al., 630
- Proshansky, H. M.: book review of Urban stress, 1275A
- Psychosocial processes and communications technology (AAAS), 524
- Pulmonary reactions to coal dust, M. M. KEY et al. (Eds.), book review by S. Rae, 50

## Q

- Quaternary paleotemperatures and the duration of the high-temperature intervals, C. Emiliani, 398
- Quest for environmental indices, The (editorial), R. E. Train, 121
- Quillian, M. R.: book review of Intelligence, 971

## R

- Rabson, A. S. See Bastian, F. O., et al.
- Radio tracking of solar energetic particles through interplanetary space, J. Fainberg et al., 743
- Rae, S.: book review of Pulmonary reactions to coal dust, 50
- Ragweed hay fever: genetic control and linkage to HL-A haplotypes, B. B. Levine et al., 1201
- RAJARTNAM, N. See CRONBACH, L. J., et al.
- Ramirez, F.: book review of Sulfur research trends, 51
- Rao, K. R. See Vyas, G. N., et al.
- Raphides with barbs and grooves in *Xanthosoma sagittifolium* (Araceae), W. S. Sakai et al., 314
- Rat origin of CHB cells, A. C. Stoolmiller et al., 1308
- RATHER, L. J., Addison and the white corpuscles, book review of, 152
- Rats drink less cool water: a change in the taste of water?, L. M. Bartoshuk, G. Kapatos, R. M. Gold, 1121
- Raven, P. H. See Wilson, E. O., et al.
- Reactions of molecules at electrodes, N. S. HUSH (Ed.), book review by H. Gerscher, 1194
- Recognition of cancer in vivo by nuclear magnetic resonance, I. D. Weisman et al., 1288
- Rees, M.: Come, now, and let us reason together (editorial), 1155
- Reflections on campus pessimism, S. Gorvitz, 586
- REGAN, D., Evoked potentials in psychology, sensory physiology and clinical medicine, book review of, 150
- Regulation of testis function in golden hamsters: a circadian clock measures photoperiodic time, J. A. Elliott et al., 771
- Reichlin, M.: book review of Hemoglobin and myoglobin in their reactions with ligands, 296
- Reiner, A. M., and E. Becker: Marvin Gardens revisited (letter), 1041
- Reliability of consumer goods (editorial), P. H. Abelson, 937
- Remanent magnetization of lunar soils, The, M. Fuller, 154
- Reporter, M., and G. C. Rosenquist: Adenosine 3',5'-monophosphate: regional differences in chick embryos at the head process stage, 628

- Research at Oberlin (letter), David L. Anderson and J. N. Palmieri, 811
- Research natural areas (letter), S. D. Veirs, 350
- Research News: A black hole in our galaxy?, 488; conservation of energy and the potential for more efficient use, 1079; cyclic AMP in brain, 1188; decline of the Hubble constant, 600; energy needs and projected demands, 1186; fission and the pro's and con's of nuclear power, 147; frog shortage possible this winter, 387; fuel cells, 1273; fuel from wastes, 599; fusion and Princeton tokamak, 1274B; gasification, a rediscovered source of clean fuel, 44; hydrogen as synthetic fuel of the future, 849; magnetic containment fusion, 291; magnetohydrodynamic power, 386; new means of transmitting electricity, 968; Nobel prize for chemistry, 492; Nobel prize for economic science, 487; Nobel prize for physics, 489; Nobel prize for physiology or medicine, 384; particle physics, 852; photovoltaic cells and direct conversion of solar energy, 732; phthalic acid esters, 46; polychlorinated biphenyls, 388; "virroids"—a new kind of pathogen?, 734
- Reversed development and cellular aging in an insect, S. D. Beck and R. K. Bharadwaj, 1210
- Rex, R. W. See Elders, W. A., et al.
- Rich, A. See Habener, J. F., et al.
- Richards, F. M. (Research News): The 1972 Nobel prize for chemistry, 492
- Richardson, J. S. See Thoa, N. B., et al.
- Richter, C. B. See Tennant, R. W.
- Ridge transform fault spreading pattern in freezing wax, D. W. Oldenburg and J. N. Brune, 301
- Ridgway, S. T. See Pilcher, C. B., et al.
- RILEY, M. W., et al., Aging and society, book review of, 294
- Robards, A. W., and M. E. Robb: Uptake and binding of uranyl ions by barley roots, 980
- Robb, M. E. See Robards, A. W.
- Robertson, D. S. See Hinteregger, H. F., et al. See also Preston, R. A., et al.
- ROBERTSON, J. A. See ZINBERG, N. E.
- Robin, E. D. See Theodore, J., et al.
- ROBINSON, P. J., and K. A. HOLBROOK, Unimolecular reactions, book review of, 973
- Robinson, P. T. See Elders, W. A., et al.
- Roblin, R. See Neufeld, E. F., et al.
- Roffwarg, H. P. See Pessah, M. A.
- Rogers, A. E. E. See Hinteregger, H. F., et al. See also Preston, R. A., et al. See also Shapiro, I. I., et al.
- Rogers, S. See Neufeld, E. F., et al.
- Rollins, J. W., and R. A. Flickinger: Collagen synthesis in *Xenopus* oocytes after injection of nuclear RNA of frog embryos, 1204
- Rose, R. M., et al.: Plasma testosterone levels in the male rhesus: influences of sexual and social stimuli, 643
- Rosen, J. J. See Bryant, R. C., et al.
- Rosenberg, M.: book review of Secondary analysis of sample surveys, 1193
- Rosenblatt, F. See Bryant, R. C., et al.
- Rosenquist, G. C. See Reporter, M.
- Roth, J. See Gavin, J. R., III, et al.
- Rothberg, R. H. See Wainer, B. H., et al.
- Rothschild, M., and B. Ford: Breeding cycle of the flea *Cediopsylla simplex* is controlled by breeding cycle of host, 625
- ROTHSTEIN, W. G., American physicians in the nineteenth century, book review of, 975
- Rous sarcoma virus nucleotide sequences in cellular DNA: measurement by RNA-DNA hybridization, P. E. Neiman, 750
- Rowe, W. P., et al.: Genetic mapping of a murine leukemia virus-inducing locus of AKR mice, 860

- Rowntree, V. J. See Taylor, C. R., et al.
- Roy, R.: University-industry interaction patterns, 955
- Rudnick, A. W. See Nofziger, J. C., et al.
- Running up and down hills: some consequences of size, C. R. Taylor, 1096

## S

- Saaty, T. L.: Operations research: some contributions to mathematics, 1061
- Sachar, E. J., et al.: Growth hormone responses to L-dopa in depressed patients, 1304
- Sachs, R. G. See Gal-Or, B.
- Sackett, W. M. See Munson, R. D., et al.
- Sade, D. S.: book review of The sexual code, 854
- Saenger, G. See Stein, Z., et al.
- Safe, S. See Hutzinger, O., et al.
- Safety at Rocky Flats (letter), E. A. Martell, 350
- Sakai, W. S., et al.: Raphides with barbs and grooves in *Xanthosoma sagittifolium* (Araceae), 314
- Saltbush leaves: excision of hypersaline tissue by a kangaroo rat, G. J. Kenagy, 1094
- Salvage archeology (letter), W. A. Longacre and R. G. Vivian, 811
- Samuelson, P. A. (Research News): The 1972 Nobel prize for economic science, 487
- Sand and sandstone, F. J. PETTJOHN et al., book review by H. Blatt, 497
- Sandstone: secular trends in lithology in southwestern Montana, M. McLane, 502
- Santos, G. W. See Bias, W. B., et al.
- Sato, H. See Stockert, E., et al.
- Sato, K., et al.: Phosphorylase: a new isozyme in rat hepatic tumors and fetal liver, 879
- Sassin, J. See Sachar, E. J., et al.
- Sato, G. H. See Stoolmiller, A. C., et al.
- Scanning x-ray microscope using synchrotron radiation, A. P. Horowitz and J. A. Howell, 608
- Scarpellino, R. See Bartoshuk, L. M., C.-H. Lee, R. Scarpellino
- Scarr-Salapatek, S. See Dawes, R. M., et al.
- SCHEDL, K. E., Monographie der familie Platypodidae, Coleoptera, book review of, 1085
- Schimmerling, W. See McNulty, P. J., et al.
- Schindler, D. G. See Jacob, S. T., et al.
- SCHMID, E., Atlas of animal bones, book review of, 297
- Schneiderman, M. A., and J. A. Peters: Cancer prevention (letter), 697
- Schoener, T. W., and S. A. Boorman: book reviews of Geographical ecology, 389
- Schopf, T. J. M.: book review of The biochemistry of animal fossils, 1086
- Schrauzer, G. N.: book review of Inorganic chemistry of vitamin B<sub>12</sub>, 51
- Schulman, E. M., and C. Walling: Phosphorescence of adsorbed ionic organic molecules at room temperature, 53
- Schumm, S. A.: book review of Hillslope form and process, 1083
- Schussler, G. C.: Thyroxine-binding globulin: specificity for the hormonally active conformation of triiodothyronine, 172
- Schwartz, E. See Gill, F., et al.
- Schwartz, N. B. See Bolker, E.
- Science and values (editorial), R. S. Berman, 453
- Science, technology, and diplomacy (editorial), P. H. Abelson, 701
- Scoffin, T. P.: Fossilization of Bermuda patch reefs, 1280
- Scott, D. W. See Levy, N. L., et al.



- Scott, S.: Lessons from the history of American broadcasting, 1263
- Secondary analysis of sample surveys, H. H. HYMAN, book review by M. Rosenberg, 1193
- Selection for circadian eclosion time in *Drosophila melanogaster*, D. L. Clayton and J. V. Paitetta, 994
- Self, H. L. See Nofziger, J. C., et al.
- Self-stimulation in the ventromedial hypothalamus, G. G. Ball, 72
- Sexual code, The, W. WICKLER, book review by D. S. Sade, 854
- Seymour, R. S. See Nagy, K. A., et al.
- SHAGASS, C.: Evoked brain potentials in psychiatry, book review of, 150
- Shapiro, I. I. See Counselman, C. C., III, et al. See also Greenberg, R. J., et al. See also Hinteregger, H. F., et al. See also Preston, R. A., et al.
- Shapiro, I. I., et al.: Lunar topography: global determination by radar, 939
- Shapley, D. (News and Comment): Chinese scientists (nonmedical) to visit the United States, 289; Committee on Public Engineering Policy studies program of Research Applied to National Needs, 145, 1270; Icelandic fishing, 965; New York University and red ink, 1072; technology prize, 1271; science shuffle in government agencies, 1077; weather watch, 144
- Shaw, C. R. See Busbee, D. L., et al.
- Shepherd, R. G.: Incised river meanders: evolution in simulated bedrock, 409
- Sherrick, C. E. See Geldard, F. A.
- Shipton, H. W.: book review of Annual review of biophysics and bioengineering, 1083
- Shivers, C. A., et al.: Inhibition of sperm-egg interaction by specific antibody, 1211
- Sholman, L. See Swift, M., et al.
- Shorey, H. H. See Farkas, S. R.
- Shows, T. B., et al.: Human-mouse cell hybrids: a suggestion of structural mutation for dipeptidase-2 deficiency in mouse cells, 58
- Shucard, D. W. See Dawes, R. M., et al.
- Siegmán, A. E.: book review of Topics in solid state and quantum electronics, 152
- SIEVER, R. See PETTITJOHN, F. J.
- Sievers, A. J.: book review of Submillimetre spectroscopy, 1085
- Signer, E. See del Jones, F., et al.
- Silberglid, R. E. See Ghiradella, H., et al.
- Siliceous algal and bacterial stromatolites in hot spring and geyser effluents of Yellowstone National Park, M. R. Walter et al., 402
- Silicon: an essential element for the chick, E. M. Carlisle, 619
- Silver, E. See Brace, W. F., et al.
- Silversmith, L. G.: Courtesy (letter), 11
- Similarity in developmental profile among related pairs of human infants, R. B. McCall et al., 1004
- SINANOGU, O. See CONDON, E. U.
- SINGER, J. E. See GLASS, D. C.
- Singer, R.: book review of The assessment of population affinities in man, 1192
- Siopes, T. D. See Homma, K., et al.
- Size of suspended particulate matter in air, The, R. E. Lee, Jr., 567
- SKUDRZYK, E.: The foundations of acoustics, book review of, 497
- Slade, M. A. See Shapiro, I. I., et al.
- Slichter, C. P. See Pines, D.
- Smith, D. E., et al.: Polar motion from laser tracking of artificial satellites, 405
- SMITH, H. H. (Ed.): Evolution of genetic systems, book review of, 605
- Smith, J. G., Jr. See Gelfont, S.
- SMITH, M. See JENCKS, C., et al.
- Smith, R. H., and R. C. von Borstel: Genetic control of insect populations, 1164
- Smoke of cigarettes and little cigars: an analytical comparison, D. Hoffmann and E. L. Wynder, 1197
- Snyder, C. B. See Chow, T. J., et al.
- Snyder, S. H. See Bennett, J. P., Jr., et al. See also Yamamura, H. I.
- Snyderman, R. See Levy, N. L., et al.
- Social construction of communities, The, G. D. SUTTLES: book review by S. Milgram, 494
- Social experimentation and public policy (AAAS), 186
- S-100 protein synthesis by isolated polyribosomes from rat brain, M. P. Lerner and H. R. Herschman, 995
- Sonnet, C. P., et al.: Electrodynamic sailing: beating in the solar wind, 1115
- Space technology: EROS, ERTS, and the space shuttle (AAAS), 187
- Spalding, R. F. See Munson, R. D., et al.
- Spates, G. E. See Wright, James E.
- Spector, S. See Berkowitz, B.
- Speer, C. A., and D. M. Hammond: Motility of macrogamonts of *Eimeria magna* (Coccidia) in cell culture, 763
- Spicer, E. H.: book review of New perspectives on the Pueblos, 1275B
- Spontaneous middle ear muscle activity in man: a rapid eye movement sleep phenomenon, M. A. Pessah and H. P. Roffwarg, 773
- Stadler, U. C. See Weinstein, I. B., et al.
- Stegink, L. D., and L. D. Besten: Synthesis of cysteine from methionine in normal adult subjects: effect of route of alimentation, 514
- Stein, D. G. See Bryant, R. C., et al.
- Stein, J. See Glickstein, M., et al.
- Stein, S. See Udenfriend, S., et al.
- Stein, Z., et al.: Nutrition and mental performance, 708
- Stember, R. H. See Levine, B. B., et al.
- Stetson, M. H. See Elliott, J. A., et al.
- Stinchcombe, A. L.: book review of Inequality, 603
- Stockert, E., et al.: Location of the second gene required for expression of the leukemia-associated mouse antigen G<sub>1x</sub>, 862
- Stone, J. C.: book review of Maps and man, 606
- STONE, P. B., See HORSFIELD, B.
- Stone, R. G. See Fainberg, J., et al.
- Stoolmiller, A. C., et al.: Rat origin of CHB cells, 1308
- Stroun, M. See Anker, P.
- Structure of morphine monohemisuccinate, The, B. H. Wainer et al., 647
- STRYER, L. See MORALES, M. F., et al.
- Submillimetre spectroscopy, G. W. CHANTRY, book review by A. J. Sievers, 1085
- Sugita, M., et al.: Ceramidase deficiency in Farber's disease (lipogranulomatosis), 1100
- Sulfur research trends, book review by F. Ramirez, 51
- Summated cortical evoked response testing in the deafferented primate, R. Cohn et al., 1113
- Sunder, W. A. See Burbank, R. D., et al.
- Superheated ice: true compression fractures and fast internal melting, Charles A. Knight and N. C. Knight, 613
- Superheavy elements, S. G. Thompson and C. F. Tsang, 1047
- Supporting and managing technological development (AAAS), 187
- Surpuriya, V. See Higuchi, W. I., et al.
- Survival of mouse embryos frozen to -196° and -269°C, D. G. Whittingham et al., 411
- Survival of *Rana pipiens* in deionized water, R. D. McAfee and H. M. Kalckar, 183
- Susser, M. See Stein, Z., et al.
- SUTTLES, G. D.: The social construction of communities, book review of, 494
- Sweeley, C. C. See Neufeld, E. F., et al.
- Sweet taste of water induced by artichoke (*Cynara scolymus*), L. M. Bartoshuk, C.-H. Lee, R. Scarpellino, 988
- Swift, M., et al.: Diabetes mellitus and the gene for Fanconi's anemia, 308
- Synapses onto different morphological types of retinal ganglion cells, R. W. West and J. E. Dowling, 510
- Synaptic transmission at single glomeruli in the turtle cerebellum, J. V. Walsh et al., 881
- Synthesis of cysteine from methionine in normal adult subjects: effect of route of alimentation, L. D. Stegink and L. D. Besten, 514
- Synthetic rat scotophobin induces dark avoidance in mice, D. H. Malin and H. N. Guttman, 1219
- Systems analysis in public policy, I. R. Hoos, book review by S. M. Pollock, 739
- T**
- Taber, R. D.: book review of Bears, 297
- Tannenbaum, S. R. See del Jones, F., et al.
- Tartaglia, N. A. See Lanzerotti, L. J., et al.
- Taste stimuli: time course of peripheral nerve response and theoretical models, J. R. Faulk and B. P. Halpern, 73
- Taub, A.: Acupuncture (letter), 9
- Taub, E. See Cohn, R., et al.
- Tax the integrated pollution exposure, R. Wilson, 182
- Taylor, C. R., et al.: Running up and down hills: some consequences of size, 1096
- Technology assessment (letter), P. B. Yeager, 1141
- Tedesco, T. A., et al.: Galactokinase: evidence for a new racial polymorphism, 176
- Temperature regulation by the inflorescence of philodendron, K. A. Nagy et al., 1195
- Temperature tolerance of pathogenic and nonpathogenic free-living amoebae, J. L. Griffin, 869
- Tennant, R. W., and B. Richter: Murine leukemia virus: restriction in fused permissive and nonpermissive cells, 516
- Terasaki, P. I. See Opelz, G., et al.
- Tevethia, S. S. See Prasad, R., et al.
- Than, L. V., See del Jones, D., et al.
- Theodore, J., et al.: Implantation of exogenous enzymatic activity in isolated alveolar macrophages, 1302
- Thoa, N. B., et al.: 6-Hydroxydopa depletion of brain norepinephrine and the facilitation of aggressive behavior, 75
- Thomas, D. R. See Engberg, L. A., et al.
- THOMAS, G., et al. (Eds.): Electron microscopy and structure of materials, book review of, 857
- Thompson, F. M., et al.: Detergent effects on a reverse transcriptase activity and on inhibition by rifamycin derivatives, 505
- Thompson, S. G., and C. F. Tsang: Superheavy elements, 1047
- Thompson, T. W. See Shapiro, I. I., et al.
- Thymus-dependent and thymus-independent lymphocyte separation: relation to exposed sialic acid on cell surface, S. Nordling et al., 1001
- Thyrotropin releasing hormone: enhancement of dopa activity by a hypothalamic hormone, N. P. Plotnikoff et al., 417
- THROWER, N. J. W., Maps and man, book review of, 606
- Thyroxine-binding globulin: specificity for the hormonally active conformation of triiodothyronine, G. C. Schussler, 172
- TILGHMAN, R. C. See BEERS, R. F., et al.
- Time reversal, and irreversibility, B. Gal-Or and R. G. Sachs, 1119
- Topics in solid state and quantum electronics, W. D. HERSHBERGER (Ed.), book review by A. E. Siegman, 152



- Train, R. E.: The quest for environmental indices (*editorial*), 121  
 Tralka, T. S. See Bastian, F. O., *et al.*  
 Transfer factor: delayed hypersensitivity to *Schistosoma mansoni* and tuberculin in *Macaca mulatta*, S. E. Maddison *et al.*, 757  
 Translation of bacteriophage Q $\beta$  messenger RNA in a murine Krebs 2 ascites tumor cell-free system, H. Aviv *et al.*, 1293  
 Tsang, C. F. See Thompson, S. G.  
 Turek, F. W.: Circadian involvement in termination of the refractory period in two sparrows, 1112  
 Tweedle, C. D. See Pitman, R., *et al.*  
 Type C virus from cell cultures of chemically induced rat hepatomas, I. B. Weinstein *et al.*, 1098  
 Tyrrell, T. See Chapman, D., *et al.*  
 Tytell, M. See Myers, R. D.

## U

- Udenfriend, S., and P. Bartl (*meeting report*): Arene oxides: biochemistry and metabolism, 779  
 Udenfriend, S., *et al.*: Fluorescamine: a reagent for assay of amino acids, peptides, proteins, and primary amines in the picomole range, 871  
 Ukena, T. E. See Yin, H. H., *et al.*  
 Ultraviolet reflection of a male butterfly: interference color caused by thin-layer elaboration of wing scales, H. Ghiradella *et al.*, 1214  
 Understanding science (*letter*), M. Goran, 352  
 Unemployed engineers (*letter*), E. Weiss, 240  
 Unimolecular reactions, P. J. ROBINSON and K. A. HOLBROOK, *book review* by D. Bunker, 973  
 University-industry interaction patterns, R. Roy, 955  
 Upper Paleolithic notation and symbol, A. Marshack, 817  
 Uptake and binding of uranyl ions by barley roots, A. W. Robards and M. E. Robb, 980  
 Uranium in runoff, R. D. Munson *et al.*, 77  
 Urban stress, D. C. GLASS and J. E. SINGER, *book review* by H. M. Proshansky, 1275A.

## V

- Vaartaja, O. See Johnson, L. J., *et al.*  
 VALDRE, U. (Ed.), *Electron microscopy in material science, book review* of, 857  
 van der Spoel, S. See Wilson, E. O., *et al.*  
 van Soest, R. W. M. See Wilson, E. O., *et al.*  
 Van Trump, J. E., and S. L. Miller: Prebiotic synthesis of methionine, 859  
 Vaughan, H. G., Jr.: *book review* of Evoked brain potentials in psychiatry and Evoked potentials in psychology, sensory physiology and clinical medicine, 150  
 Veirs, S. D.: Research natural areas (*letter*), 350  
 Verguèse, D. (*News and Comment*): Europe and the environment, 381  
 Vetter, B. M.: More women for higher education (*editorial*), 815  
 Vijaykumar, A. See Barber, R. T., *et al.*  
 Virions from progressive multifocal leukoencephalopathy: rapid serological identification by electron microscopy, J. B. Penney, Jr., *et al.*, 60  
 Visual acuity and contrast sensitivity in patients with cerebral lesions, I. Bodis-Wollner, 769  
 Visual input to the pontine nuclei, M. Glickstein *et al.*, 1110

- Visual receptive fields sensitive to absolute and relative motion during tracking, B. Bridgeman, 1106  
 Visual sensations induced by relativistic nitrogen nuclei, P. J. McNulty *et al.*, 160  
 Vivian, R. G. See Longacre, W. A.  
 von Borstel, R. C. See Smith, R. H.  
 Vosburgh, K. G. See McNulty, P. J., *et al.*  
 Vyas, G. N., *et al.*: Australia antigen (hepatitis B antigen): a conformational antigen dependent on disulfide bonds, 1300

## W

- Wachs, T. D. See McCall, R. B., *et al.*  
 Wade, N. (*News and Comment*): creationists and evolutionists in California, 724; earthquake accord and the test ban, 38; earthquake research and the pluralistic system, 39; health fads, 379; Nader's Congress project, 142; Nader's profiles, 382; Roszak, a visionary critic of science, 960; Salk Institute, 846; U.K. environment minister deplores rule by decree, 144  
 Wagner, R. P.: *book review* of Evolution of genetic systems, 605  
 Wainer, B. H., *et al.*: The structure of morphine monohemisuccinate, 647  
 Wait, J. R.: Project Sanguine, 272  
 Walker, R. M. See Fleischer, R. L., *et al.*  
 Walker, T. J., and D. Dew: Wing movements of calling katydids: fiddling finesse, 174  
 Walling, C. See Schulman, E. M.  
 Wallis, M. K., and A. H. Delsemme: Cometary hydrogen and hydroxyl comas, 78  
 Walsh, J. (*News and Comment*): Congress and election turnover, 726; environmental legislation, 593; medicine at Michigan State, 36, 288, 377; strip mining issue in Moore-Rockefeller race, 484; U.N. environmental program, 1183  
 Walsh, J. V., *et al.*: Synaptic transmission at single glomeruli in the turtle cerebellum, 881  
 Walter, M. R., *et al.*: Siliceous algal and bacterial stromatolites in hot spring and geyser effluents of Yellowstone National Park, 402  
 Water pollution: organic compounds in the Charles River, Boston, R. A. Hites and K. Biemann, 158  
 Water-soluble insulin receptors from human lymphocytes, J. R. Gavin III *et al.*, 168  
 Watkins, S. F. See Bernal, I.  
 Weber, H. P. See Baker, R. W., *et al.*  
 WEBER, N. A.: Gardening ants, the attines, *book review* of, 856  
 Weigle, M. See Udenfriend, S., *et al.*  
 Weinberg, A. M. See Edsall, J. T.  
 WEINER, J. S., and J. HUIZINGA (Eds.), The assessment of population affinities in man, *book review* of, 1192  
 Weiner, L. P. See Penney, J. B., Jr., *et al.*  
 Weinhouse, S. See Sato, K., *et al.*  
 Weinstein, I. B., *et al.*: Type C virus from cell cultures of chemically induced rat hepatomas, 1098  
 Weisman, I. D., *et al.*: Recognition of cancer in vivo by nuclear magnetic resonance, 1288  
 Weiss, D., *et al.*: Lead content of human hair (1871-1971), 69  
 Weiss, E.: Unemployed engineers (*letter*), 240  
 WEISS, L.: The cells and tissues of the immune system, *book review* of, 49  
 Weitzman, E. D. See Sachar, E. J., *et al.*  
 Weizenbaum, J. See Coles, L. S., *et al.*  
 Welch, B. L. See Goldberg, A. M.  
 Welker, R. L. See Engberg, L. A., *et al.*  
 Weneser, J. See Panofsky, W. K. H., *et al.*  
 West, R. W., and J. E. Dowling: Synapses onto different morphological types of retinal ganglion cells, 510  
 Weston, R. E., Jr.: *book review* of The chemical statics and kinetics of solutions, 741  
 When will the present interglacial end? (*meeting report*), G. J. Kukla and R. K. Matthews, 190  
 Whitney, A. R. See Hinteregger, H. F., *et al.* See also Preston, R. A., *et al.*  
 Whittaker, A. G., and G. M. Wolten: Carbon: a suggested new hexagonal crystal form, 54  
 Whitten, B. See Weiss, D., *et al.*  
 Whittingham, D. G., *et al.*: Survival of mouse embryos frozen to -196° and -269°C, 411  
 WICKLER, W.: The sexual code, *book review* of, 854  
 Wildish, D. J. See Hutzinger, O., *et al.*  
 Willerman, L. See Dawes, R. M., *et al.*  
 Wilson, E. O., *et al.*: Modern taxonomy (*letters*), 1151  
 Wilson, I. C. See Plotnikoff, N. P., *et al.*  
 Wilson, R.: Tax the integrated pollution exposure, 182  
 Wilson, R. S. See McCall, R. B., *et al.*  
 Wilson, W. O. See Homma, K., *et al.*  
 Wing movements of calling katydids: fiddling finesse, T. J. Walker and D. Dew, 174  
 Wise, J. K., *et al.*: Obesity: evidence of decreased secretion of glucagon, 513  
 Wolten, G. M. See Whittaker, A. G.  
 "Women's lib" (*letter*), R. G. Lynch, 11  
 Wood, S. L.: *book review* of Monographie der familie Platypodidae, Coleoptera, 1085  
 Woods, M. W. See Weisman, I. D., *et al.*  
 Woodard, C. J. See Marx, S. J., *et al.*  
 Woodwell, G. M.: *book review* of Exploring new ethics for survival, 1191. See also Hughes, J. T., *et al.*  
 Woronow, A.: Origin of the martian chaotic terrains, 649  
 Wright, James E., and G. E. Spates: A new approach in integrated control: insect juvenile hormone plus a hymenopterian parasite against the stable fly, 1292  
 Wright, J. E. See Davison, M. T., *et al.*  
 Wurtman, R. J. See Fernstrom, J. D.  
 WYCKOFF, R. W. G.: The biochemistry of animal fossils, *book review* of, 1086  
 Wynder, E. L. See Hoffmann, D.

## Y and Z

- YAMAMOTO, W. S. See MORALES, M. F., *et al.*  
 Yamamura, H. I., and S. H. Snyder: Choline: high-affinity uptake by rat brain synaptosomes, 626  
 Yamazaki, T., and T. Maruyama: Evidence for the neutral hypothesis of protein polymorphism, 56  
 Yeager, P. B.: Technology assessment, (*letter*), 1141  
 Yee, C. L. See Bastian, F. O., *et al.*  
 Yin, H. H., *et al.*: Effect of colchicine, Colcemid, and vinblastine on the agglutination, by concanavalin A, of transformed cells, 867  
 Young, F. See Higuchi, W. I., *et al.*  
 Young, L. R. See Dichgans, J., *et al.*  
 ZINBERG, N. E., and J. A. ROBERTSON: Drugs and the public, *book review* of, 151  
 Zirin, H.: *book review* of Physics of the solar corona, 1085  
 Zisk, S. H.: Lunar topography: first radar-interferometer measurements of the Alphonsus-Ptolemaeus-Arzachel region, 977. See also Shapiro, I. L., *et al.*  
 Zitko, V. See Hutzinger, O., *et al.*